Sixteenth centuary accidentals and ornamentation in selected motets of Josquin Desprez: a comparativbe study of the printed intabulations with the vocal sources

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SIXTEENTH-CENTURY ACCIDENTALS AND ORNAMENTATION IN SELECTED MOTETS OF JOSQUIN DESPREZ: A COMPARATIVE STUDY OF THE PRINTED INTABULATIONS WITH THE VOCAL SOURCES

VOLUME I

by

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ABSTRACT

One of the major problems in Renaissance music scholarship has been to establish a precise understanding of the structure and development of pretonal polyphony. Scholars working toward this end have long been plagued by the ambiguities of pitch notation in the sources of vocal music from this period. Tablatures, owing to the nature of the notation, are the only Renaissance sources of polyphony which specify all pitches unambiguously. An examination of these sources, coupled with a reconstruction of the theoretical framework surrounding the incorporation of chromatic signs, is essential if one is to fully ascertain the details of pitch content and modal procedure operative during the period.

The dissertation considers a composer who was most frequently chosen for intabulation in the sixteenth century--Josquin Desprez (d. 1521). The comparative study of the materials of the dissertation establishes the parameters of sixteenth-century practices in relation to Josquin's motets. Although this study does not purport to explain what his own practices may have been, it does illustrate how musicians during the fifty or so years after his death interpreted the pitch content of his motets.

The thesis provides evidence not of a single practice but of diverse practices that were dependent, to a large part, on the preference of the individual musician. It documents the range of options open to the Renaissance performer and demonstrates that a flexible

attitude toward the treatment of dissonance existed in the sixteenth century. Both singers and instrumentalists worked within a theoretical framework in which precepts and conventions were by no means immutable.

Volume I of the dissertation discusses intabulation techniques, the filial relationships between the tablature arrangements and the vocal models, the theoretical framework surrounding the incorporation of chromatic signs, the intabulators' interpretations of pitch content in Josquin's motets and resolves the confusion associated with the pitch content and modal procedure of Absalon, fili mi. Volume II contains transcriptions of the printed intabulations of Josquin's motets that were examined for this dissertation.

VOLUME I

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CHAPTER I

INTRODUCTION

One of the major problems in Renaissance music scholarship has been to establish a precise understanding of the structure and development of pretonal polyphony. Scholars working toward this end have long been plagued by the ambiguities of pitch notation in the sources of vocal music from this period. During the Renaissance, the final shaping of the music in both harmonic and melodic content was the domain of the performer not the composer. Chromatic signs[1] largely were left unspecified in vocal sources; consequently certain details of modal procedure were never notated. Singers were expected to be familiar with the rules governing the application of these signs and to make the appropriate alterations at the time of performance. Although the principles behind this improvisatory art were discussed in contemporary theoretical treatises and manuals, the explanations are far too cursory to yield a comprehensive understanding of sixteenth-century procedures. Throughout the century, however, keyboard players, lutenists, vihuelists and guitarists continually intabulated vocal music for their respective instruments. These transcriptions have recorded the practices of many of the greatest performers from the era, thus providing modern scholars and performers with a precise view of how sixteenth-century musicians resolved the pitch ambiguities in contemporary vocal sources.

Tablatures, owing to the nature of the notation, are

the only Renaissance sources of polyphony which specify all pitches unambiguously. An examination of these sources, coupled with a reconstruction of the theoretical framework surrounding the incorporation of chromatic signs, is essential if one is to fully ascertain the details of pitch content and modal procedure operative during the period. This avenue of approach has received scant attention in the musicological literature published to date even though leading musicologists such as John M. Ward, Howard Mayer Brown and James Haar have pointed to the necessity of this type of investigation since the early 1950s[2]. The present study will remedy the neglect that this area has experienced.

The dissertation will consider a composer who was most frequently chosen for intabulation in the sixteenth century--Josquin Desprez (d. 1521). A number of Josquin's motets were intabulated during the century and fifteen of these works have been chosen as the subject for this study. The motets were selected in preference to Josquin's mass cycles or to his secular works because the extant sources for both the intabulations and the motets themselves span the longest time period (the printed intabulations are dated between 1507 and 1578 and the printed vocal sources between 1504 and 1616) and encompass the widest geographic area (Poland, Germany, France, Spain and Italy) and therefore offer a substantial cross - section of sixteenth-century practices. The materials of the dissertation include 55 vocal manuscripts, 21 printed vocal sources, 28 tablature sources and a number of theoretical treatises. A

comparative study of these materials will illuminate common procedures of the time. Although this study does not purport to explain what Josquin's own practices might have been, it does illustrate how musicians during the fifty or so years after his death interpreted the pitch content of his motets. The recognition of the existence of a range of practices will considerably modify our perception of the structure and development of pretonal polyphony. The lack of systematic knowledge in this area has forced modern editors to base their own interpretations of pitch content on incomplete documentary evidence. This dissertation will establish the parameters of sixteenth-century practices in relation to Josquin's motets.

In any reconstruction of a past tradition, it is necessary to determine the boundaries of the style. This must be achieved not only by documenting the range of theoretical possibilities that was open to the performer but also by indicating what chromatic signs practising musicians actually incorporated in their performances. The interaction of these two avenues of approach should produce a reasonably accurate picture of contemporary performance practices. It has, however, proved impossible to pinpoint geographic and chronological trends, as elements of conservatism and radicalism coexisted throughout the century. Nevertheless, the evidence presented will demonstrate that the instrumentalist worked within the theoretical framework that survives in late fifteenth- and sixteenth-century treatises and that the precepts and conventions discussed

in these treatises were by no means immutable.

The research builds upon the work of other scholars. The theory of hexachordal transposition advanced, most convincingly, by Margaret Bent and Andrew Hughes[3] coupled with Gaston Allaire's[4] explanation of the oscillatory nature of the hexachord system itself has provided the basis for resolving the problems of pitch content and modal procedure associated with the sources of Absalon, fili mi. Furthermore, articles by Jaap van Benthem and Thomas Noblitt[5] have demonstrated that the nonharmonic relation was a characteristic feature of early sixteenth-century vocal music, and the broad spectrum of intabulations examined in this dissertation confirms their findings. But most importantly, it was Howard Mayer Brown's two introductory studies on plucked-instrument intabulations[6] which revealed the potential that this vast untapped repertoire provided for documenting the practices discussed in this dissertation. The present study, however, is not confined to plucked-instrument sources and it represents the first investigation of pitch content to examine all the sources of a prescribed repertoire.

The study begins with an account of the method for intabulating vocal music as discussed in Renaissance instruction manuals. The concern displayed in these sources for producing an accurate transcription of the model provides the rationale for the comparative study contained in the ensuing chapters. In preparation for this comparative study, the next chapter is devoted to

ascertaining, in so far as surviving documents allow, the source from which the intabulator might have prepared his transcription. A discussion of the melodic variants in the vocal sources of the five motets chosen for detailed examination forms the basis of this chapter. A reconstruction of the theoretical framework surrounding the incorporation of chromatic signs is the concern of Chapter IV, and Chapter V illustrates the various manners in which the instrumentalists interpreted the pitch content of Josquin's motets. The final chapter, by exploring the interrelationship of the extant sources for Absalon, fili mi, demonstrates that the comparative study of all the sources of one motet is indeed useful for increasing our understanding of individual works and serves as a fitting conclusion to this dissertation.

Volume II contains transcriptions of the printed intabulations of Josquin's motets that were examined for this dissertation.

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Terminology

The word 'accidental', with all its modern implications, is avoided as a generic term for denoting the symbols ♯ and ♭. In its place, Michael Praetorius' term 'chromatic sign' (signum chromaticum) has been adopted.[7] Moreover, certain Renaissance treatises label the individual signs as sharps or flats and

describe their function as altering pitches either by raising or lowering them a semitone. Adrian Le Roy, in discussing the meaning of these signs in mensural notation, makes this clear: "...the chaunge [alteration] into b sharpe [by means of a #] ... doeth holde up the tune halfe a note higher, and b flatte [by means of a b], contrarywise doeth lette it fall halfe a note lower ...".[8] However, even though it is impossible to determine, at least as far as most Renissance fretted instruments are concerned, the size of this semitonal alteration,[9] tablatures unmistakably show which notes in the vocal sources specific performers rendered as sharps or as flats.

The term 'musica ficta' has similarly been avoided. Since this term properly refers to only those fictitious notes that lie outside the <u>recta</u> pitches of the hexachord system, it cannot be employed as a generic term for all notes altered by chromatic signs. For example, in works with a signature of one flat, the hexachord system is transposed to hexachords on C, F and B^b thereby making the pitch E^b a <u>recta</u> note:

H C D E F G A

N F G A B^b C D

S B^b C D E^b F G

It would, then, be improper to regard this E^b as 'musica ficta'.

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Throughout the dissertation, books, articles, editions and manuscripts will be cited in an abbreviated form. For example, the reference 'Apel Punto' is an abbreviation of 'Willi Apel, "Punto intenso contra remisso," in Music East and West, ed. Thomas Noblitt (New York, 1981), pp. 175-82', and the reference 'Bermudo Dec IV, 48, f. 87^{v}' is a shortened form of 'Juan Bermudo, Declaracion de instrumentos musicales (Osuna, 1555), Book IV, Chapter 48, folio 87^{v}'. Similarly, 'Bru 215-6' designates the manuscript 'Brussels, Bibliothèque Royale, Mss. 215-216'. Printed tablature sources are cited by their number in Howard Mayer Brown's Instrumental Music Printed Before 1600: A Bibliography (Cambridge, Mass., 1965), and printed vocal sources are cited by their RISM number. The spelling of titles of early books follows RISM and/or Brown. All abbreviations are listed in the Bibliography.

CHAPTER II

INTABULATION TECHNIQUES

The technique of converting mensural notation into tablature notation was an essential skill for the sixteenth-century instrumentalist. In fact, the acquisition of this skill was considered to be of such importance to the development of the student performer that a number of sixteenth-century authors included instructions for intabulating vocal music in their writings. The clearest and fullest discussions of the method employed are found in sources that survive from the mid-century:

Gerle, Hans. Musica und Tabulatur. Nurnberg, 1546.

Bermudo, Juan. El libro llamado declaracion de instrumentos musicales. Osuna, 1555.

Panhormitano, Bartolomeo Lieto. Dialogo quarto di musica. Naples, 1559.

Galilei, Vincenzo. Fronimo Dialogo. Venice, 1568; rev. Venice, 1584.

Le Roy, Adrian. Instruction de partir toute des huits divers tons en tablature de luth. Paris, [1570]. Now lost.

Translated as
A briefe and plaine Instruction to set all Musicke of eight divers Tunes in Tableture for the Lute. London, 1574.

These sources are remarkably consistent in their explanation of a transcription process that produced a close adherence to the vocal model. The most detailed account of the procedure was given by Adrian Le Roy, who devoted his entire book to the subject. Hence, Le Roy's description of the technique, which appears to be representative of the practice followed by virtually all of the intabulators examined in this dissertation, will become the focal point of the chapter. Information from the other sources will be used to supplement Le Roy's discussion as required.

For the most part, the extant instructions are designed to enable students with little or no understanding of mensural notation to learn the technique of intabulating vocal music. Both Le Roy and Gerle make this clear:

> "Mine entent is now to teach them that are desirous to playe on the Lute, how they maye without great knowledge of Musicke set uppon that instrument all Ballets or songes, which they shall thinke good,..."[1]

> "... each fancier of art, aware of the pitfalls, may learn for himself without a special teacher how to play, bow, and transcribe for lute [and] small and large viol."[2]

Furthermore, certain comments in the instruction books reveal a concern on the part of the authors for an accurate transcription of the model. Gerle, in praising the skill of the lutenist Adolff Plindthamer (Blindhamer, c. 1475 - between 1520 and 1532), states:

> "... when he played an intabulated piece, ... [he did so in] such a form that none of the sweetness and perfection of the melody was lost. He who has such a manner, a piece measured simply in relation to the original, cannot be blamed among those understanding music [that is, he cannot be accused of violating the integrity of the parts]."[3]

Later in the century, Bermudo emphasised the importance of a faithful intabulation by singling out for ridicule those vihuelists who did not cipher counterpoint correctly:

> "I must confess that I have transcribed into mensural notation the ciphered counterpoint of a vihuelist who enjoys a decent reputation; but it contained mistakes that made singers laugh."[4]

Although Le Roy did not indicate his concern for this matter directly, some of his remarks indirectly disclose his predilection for accurate transcriptions. Specifically, Le Roy advises the lutenist to notate unisons in the model on separate strings of the lute:

> "For this cause it was necessarie to go doune from the seconde stryng, to the thirde, tournyng the .A. into .F. (whiche is his unisson upon the Lute) whiche shal maintaine the sounde of the Semibreve whole: a thyng necessarie to be observed in all other like haps ..."[5]

And at another point in the instructions, he warns that when intabulating one part, the student must observe "... the constrainte of the other partes."[6]

The choice of what music to transcribe must have been difficult for a student instrumentalist living in a cosmopolitan centre such as Paris, but Le Roy offers no guidance to help the inexperienced intabulator select appropriate works. More assistance was provided in Spain, however, for Bermudo recommends that beginners transcribe the villancicos of Juan Vasquez (c. 1510-c. 1560) and the works of Baltasar Téllez (dates unknown). Moreover, Bermudo mentions four characteristics that make a composition suitable for vihuela intabulation:

1. graceful or attractive sound
2. ease of singing and playing
3. many 'falsas b' (flat signs), as these sound very well on the vihuela
4. music that has neither a large range nor voices that are spread too far apart.

He subsequently states that the masses of Cristobal Morales embody these characteristics.[7]

Having selected the works to be intabulated, the performer must then begin the task of ciphering the voice-parts of the model. Le Roy discusses the steps to be taken when intabulating a four-voice composition, and the following is an account of the complete process as described by Le Roy and confirmed by the other instruction manuals.

1. Divide each voice part into 'measures'.

All of Le Roy's mensural music examples, notated in score, contain vertical lines which help to align the notes of the various voice-parts during the process of intabulation. On the addition of these lines, Le Roy states:

> "Here I will not forgette to tell that the learner of this Arte, may not faile after he hath set out his Treble in Tablature to tel diligently all the measures of the same [that is, divide the parts into equal 'measures'], for feare of this Inconvenience, which chaunceth oftentymes, yea to the most expert for Lacke of this diligence, to goo over and beginne againe the woorke nowe already half dooı, for that there maye happen to muche or to littell [that is, too few or too many notes in the 'measure']: so as if the foundacion be not good, all that is Laied upon must nedes goo To ruyne.' (f. 4^{r}).

Later in the same chapter Le Roy equates the word 'measure' with the word 'distaunce':

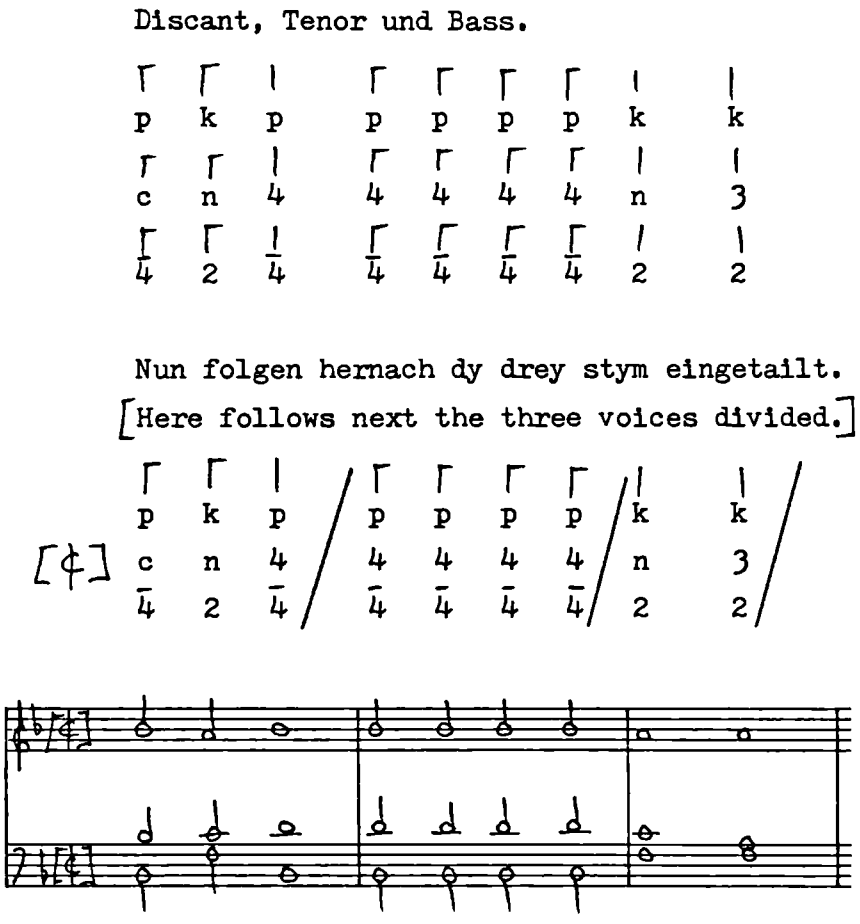
> As to the firste measure of the song of Orlande, we muste make the distaunce large enough (as it is to be observed in all the reste) because there maie chaunce many Cratchettes or Quavers, in some other partes of the song, besides those of the treble: ... For this cause the twoo distaunces, [that is, measures] the fifte and the sixte bee seen voide, because of the restes of the treble there." (f. 5^{v}).

Although Le Roy does not define the terms 'measure' and 'distaunce', it is clear that they refer to the space bounded by two vertical lines and that in ¢ mensuration this space is to have the duration of a semibreve. Le Roy's first example of intabulating presents the 'measured' voice-parts of the model in score format with a parallel transcription in tablature (see Ex. 1).

Ex. 1. Quand mon mary, mm. 1-7.

Gerle, too, discusses the addition of vertical lines: "And when I have transcribed them together from song [that is, intabulated all the parts], I will thereafter divide (eintailen) [it, the intabulation,] as it should be [divided]."[8] His example of the intabulation process clarifies this statement:[9]

Ex. 2. Scaramella (Gerle 1546, f. c^{v}), mm. 1-3.

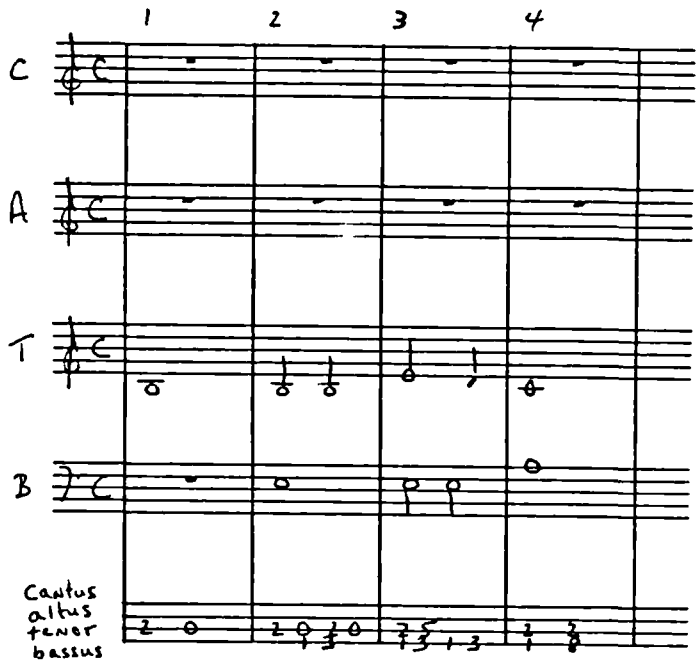


In contrast to Le Roy, however, Gerle partitions the music into breve 'measures'.

Bermudo also refers to the addition of bar-lines (virgulae) maintaining that the vocal model should be partitioned before it is intabulated.[10] He continues by stating that:

> "The lines which separate (dividen) the tactii (compasses) in the voice parts (puntado) should also divide the ciphers. Between [one] line and [the next] line one should put a semibreve if one has to play in the small tactus (compasete) but if one has to play in the long tactus (compas largo), one should put a breve.[11]
> (See Ex.3).

Ex. 3. Bermudo, f. 83^{r}, mm. 1-4.



Thus, for both Le Roy and Bermudo the addition of bar-lines helped to align the notes of the model during the process of intabulation. Moreover, at least according to Bermudo, these lines could be introduced after each semibreve unit or after each breve unit depending upon whether the tactus was alla semibreve (mensuration sign C) or alla breve (mensuration sign ¢). In practice, however, Bermudo's recommendation that bar-lines be added according to the mensuration sign was not universally followed. Spanish intabulators and certain French and Italian lutenists normally placed bar-lines after each semibreve unit in ¢ mensuration whereas other intabulators consistently partitioned the same music into breve measures.[12]

Further documentation of this bar-line/tactus relationship appears in Miguel de Fuenllana's Orphenica lyra (Seville, 1554):

> "... the tactus is a kind of motion that is carried out with the foot and hand, within which, being fast or slow, is included a tactus that is formed, in time-span from [one] beat to [the next] beat. And for knowledge of this, some lines are seen that cross, from above to below, the six courses which are here represented; and within the space there may be from one [line] to the other [following it], and successively, [between] all those [lines] remaining, a measure is formed, giving it the value that the symbols that are above it may have."[13]

Although Fuenllana clearly associates the employment of the bar-line with the division of the music into tactus units, his statement sheds no light on why he and others bisected the tactus in ¢ mensuration instead of maintaining one tactus to a measure as Bermudo had suggested--unless, of course, each portion of the tactus (that is, the separate upward and downward motions of the hand in beating time) was represented by one

measure. This supposition would seem to explain the barring discrepancies within the tablature sources; but, as other writers have recognised, our as yet imperfect understanding of tablature barlines prevents us from drawing firm conclusions.[14]

2. Determine the range ('reach or compasse') of the parts and decide to what pitch the lute must be imagined to be tuned in order to provide the most convenient means of adapting the vocal model to the practical limitations of the instrument.

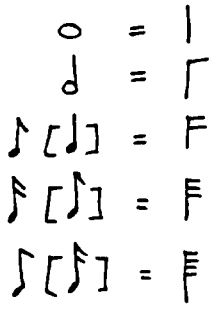
For the purposes of intabulating, the pitch of the lute was regarded as variable. Le Roy maintains that those players who are cunning in the art of ciphering "... dispose of them [the modes] diversly [that is, in many different places on the fingerboard] at their pleasure:" (f. 3^{v}). Consequently, mode 1 bemol and bequadro may be intabulated using the same tablature letters (f. 15^{v}) as may the bemol and bequadro positions of mode 2 (f. 31^{r}). The variability of the lute's pitch is further demonstrated in other statements by Le Roy. Mode 3 may be set one tone lower than usual "... for the ease of the hande ..." (f. 37^{v}) and Lasso's chanson, Je ne veux rien, may be set "... twoo notes higher ..." in order to allow the lowest notes of the bassus to be transcribed without recourse to octave transposition (f. 51^{r}). In fact, the nominal pitches of the lute that are required to set the pieces in Le Roy's examples presuppose an instrument with the first course imagined to be G, A, B^{b}, C or D.

Le Roy's statements are substantiated by Bermudo, who claims that although vihuelists normally consider their instruments to be in G or A, they are not concerned with fixed (absolute) pitch and simply assume the vihuela to be at whatever pitch is necessary to intabulate the piece at hand.[15] Similar remarks to those of Le Roy are found in Gerle's instructions.[16]

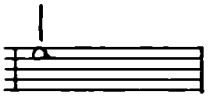
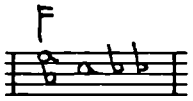
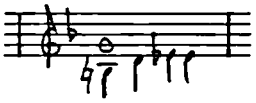
3. Set the treble (superius) in tablature.

Le Roy advises that because lutes and virginals are unlike the organ and cannot sustain notes of greater value than a semibreve, the players of these plucked instruments should proceed by semibreves taking care "... to devide Maxims alwayes in eight partes, Longes in foure, Breves in two, and so forth of other great notes which are augmented with pricks [that is, dotted notes]." (f. 4^{r}) However, at another point in the treatise, Le Roy admits that a good lute might be able to sustain a note for the duration of a dotted semibreve. (f. 22^{v})

To enable the student to readily translate mensural note-values into tablature rhythm signs, Le Roy provides the following information (f. 5^{v}):



4. Set the contratenor in tablature, making adjustments to the rhythm signs in order to accommodate the new lower voice.

The rhythm-sign required by one voice will not also be sufficient to indicate the rhythm of the next lower voice when this lower part moves in note values shorter than those of the upper voice. For example, the superius rhythm in m. 44 of Quand mon mary (f. 12^{r}) is  , but the contratenor rhythm in this bar is  . Therefore, the rhythmic indication in the tablature must be changed from  to  . This, incidentally, vindicates those modern scholars who would realise the contrapuntal implications of intabulated vocal music by transcribing the above passage as  .

5. Set the tenor and then the bassus in the same manner.

Le Roy intabulates "...one parte after the other..." (f. 26^{v}). He begins with the superius and progresses, in descending order of voice range, through the contratenor (altus), tenor and bassus.

6. Modify the intabulation with regard to "... the grace in plaiyng, as [well as] the ease or commoditie of the hande." (f. 25^{r})

Le Roy explains this step in the process as follows:

> "In this present song of Orlande of the seconde Tune, beginnyng Je l'ayme bien, whiche you maie see here of fower partes set in Tablature, all the distaunces of which I had lefte in the former example

> of three partes, onely in their naturall and gross order, here I will deliver them unto you, brought into a more artificiall sorte: so that you doe understande, that the firste manner is alwaies necessarie to beginne to set in Tablature, because in settyng (as we have shewed you in all the former examples) one parte after the other, we doe not see at the firste, the beste forme every stop is to be brought into." (f. 26^{v})

Le Roy's statement may be exemplified by comparing the 'naturall and gross order' contained in the three-part setting of Je l'ayme bien (f.25^{v}) with the 'more artificiall sorte' found in the four-part setting (f. 26^{v}):

Ex. 4. Je l'ayme bien, mm. 1-6.

In this example, Le Roy alters the fingering of measures four and five (marked with asterisks) in order to make the passage easier to play.

7. Once the literal transcription of the model has been completed, the final stage of the process is to add embellishments.

The importance of an eloquent performance adorned with figuration is made evident by Le Roy:

> "To make this woorke in all poinctes parfite, and to shewe you (as a man might saie) not onely the plaine and rude Grammer, but also further somewhat like the eloquence of Rhetorike, I have thought good in this place of the first Tune (to croune as it were the worke withall) to add an example of the same song, adorned with running poinctes and passages, as wee will likewise doe in the example of every song, given for example: to the intente the scholar maie learne to decke other songes or daunses, with like flowers and ornamentes:" (f. 13^{v}).

This passage demonstrates that Le Roy, or at least the English translator of the treatise, was familiar with the fundamental principles of rhetoric, the chief preoccupation of which in the sixteenth century was with that branch of the art known as elocution or eloquence, that is, the decoration of a speech with the figures of rhetoric.[17] For just as orators were required to clothe and fill out a speech with these figures, Renaissance performers were expected to embellish the music they played with melodic figuration. It is no accident that Le Roy likened the addition of ornaments in music to the eloquence of rhetoric. His borrowing of rhetorical vocabulary, especially his use of the words 'plaine and rude Grammar' to describe the unembellished

setting and his equation of ornaments with 'flowers', underlines the influence that rhetorical thought had upon musicians of the period.[18]

Further comments on ornamentation can be gleaned from other instruction-manuals. Gerle, for instance favours embellishment but wishes to avoid excessive ornamentation that may force the intabulator to omit some portion of the model:

> "Thus, in this [book] I have also decorated favorite pieces to the extent that even an inexperienced player might learn and play, and for that reason I have avoided much outward show, so that the tune is not destroyed and the rhythm of consonance is not obscured through the omission of some good thing".[19]

Conversely, Bermudo opposes the addition of glosas (ornaments) to keyboard transcriptions of vocal music. He maintains that the best contemporary music does not need ornaments as it "... has such wings and contains so many quick notes that it supplies both its own text and gloss." Moreover, he insists that the excellent performer plays "... so cleanly that singers who hear him can enjoy his performance." But Bermudo does permit ornamentation in older music that does not contain truly independent part writing.[20]

8. Notation of 'Triplée' passages.

In discussing the transcription of Lasso's chanson En un lieu, Le Roy defines the term 'Triplée' as follows: "[In a Triplée] three [semibreves] must bee

observed for twoo under one measure [that is, ¢ oo = 3 ooo]" (f. 46^{r}, recte 48^{r}). Hans Gerle defines the proportion in a similar manner stating that ¢ 3 is imperfect song in proportion during which ¢ oo = ¢ 3 ooo.[21] However, when intabulating passages in ¢ 3, both authors reduce the note values by half. Le Roy maintains that these minims "... shall goe no faster nor slower, than if thei were Semibreves, beyng no difference nor perfection, more in the one, then in the other." (f. 46^{r}, recte 48^{r}). Hence, in Le Roy's and in Gerle's tablature ¢ oo = 3 ♩♩♩.[22]

9. Alternate intabulation procedures.

In addition to the process of ciphering one part at a time, Le Roy briefly discusses an alternative method of intabulating:

> "We knowe well that the same might bee practised in an other sorte, that is to saie, to set first the Musicke in measures, assemblyng all the partes together one over the other, whereby there could bee none occasion to race out, but then ye must after doe as muche to bryng the same into Tablature for the instrumente, whiche would bee twoo labours for one, because that in our fashion, we shall as sone set in Tablature, as in the other ye shall onely have doen the Musicke." (f. 26^{v}).

But he rejects this method on the grounds that it consumes more time than ciphering from part-books.

Le Roy's method of intabulating was probably common practice from the 1530s on,[23] lasting until at least the early seventeenth century. Jean Baptiste Besard's 1603 statement, translated into English in 1610, provides information on how common the method must have been:

> "I have set downe no rules for transposing out of Musicke to the Scale of the Lute [that is, intabulating], because you have that delivered in the most elegant field of Emanuel Adrianus, an excellent Musitian, and in many other Bookes [that is, Adrianus and other writers had covered the topic adequately]."[24]

The intabulation instructions of Emanuel Adriansen mentioned by Besard appear in Adriansen's Novum Pratum Musicum (Antwerp, 1592, ff. $*2^{v}$ - $*12^{r}$). The instructions are mainly in the form of charts showing where the notes of the twelve modes should be played on the lute. His single example of the intabulation process follows a similar pattern to that of Le Roy except that the vocal parts do not appear in score format.

Evidence of the problems encountered by sixteenth-century lutenists in ciphering vocal music may be seen in Ms. 76b at Uppsala, Universitetsbiblioteket. The relevant folios have been isolated, reproduced and discussed by Jean-Michel Vaccaro.[25] In many ways, this manuscript represents an intabulator's working copy. The lutenist employed the standard method in which the voice

parts were transcribed one at a time, but inevitably errors were made. At one point, when the lutenist realised that he had placed the tablature letters in the wrong measure, the transcription was crossed out and re-started.[26] Later in the manuscript, the first two attempts at intabulating the chanson by Nicolas de la Grotte, Quand ce beau printems je voy, were abandoned in favour of a third version in which the lute was imagined to be at a higher pitch.[27] Furthermore, yet another version of this piece in the same hand is contained in Ms. 76c at Uppsala. But in this setting, the lute is at a pitch altogether different from the versions in Ms. 76b.[28] Clearly, the application of Le Roy's method was not as simple as the instructions professed. In at least these two manuscripts, a certain degree of experimentation was obviously required before satisfactory results could be obtained.

* * * * * * * * *

In addition to providing valuable information on intabulation techniques, Le Roy's book furnishes a unique opportunity for examining the manners in which he interpreted the pitch content of his own published vocal sources. All of the works chosen by Le Roy to exemplify intabulation method appear in the books of chansons printed in his shop in the third quarter of the century, and it is probably safe to assume that Le Roy prepared his tablature-arrangements from these editions. He drew

his material from the twelfth and from the fourteenth to eighteenth Livres de chansons[29] but only included the mensurally-notated vocal model for the first four examples of the instructions. In each of these four examples, Le Roy precisely notated in both the mensural and the tablature versions all of the pitch alterations that must be made prior to performance and he is unequivocal on the necessity of supplying chromatic signs that were not specified in the vocal source. When discussing the addition of sharps to create a subsemitone at cadence points, Le Roy observes:

> "... thei doe not use to marke them [that is, sharps], in many sortes of songe, savyng in this aswell in the Treble, as in other partes [that is, printers and scribes did not notate sharps presumably to save time and expense]." (f. 6^{r}).

However, in case beginners are unsure of where to locate these signs, Le Roy proclaims "... I will not forget to set [the sharp sign] throughout all myne examples." (f. 6^{r}). He continues by warning the uninitiated student that it may be necessary to include sharps in places other than at cadences and although he does not mention the fact, he has undoubtedly notated these signs in his examples as well.

Since Le Roy prepared such a meticulous reading of the pitch content of these chansons, it will be profitable to compare the four fully-edited mensural versions from the instructions with their counterparts in the chanson-collections in order to determine Le Roy's editorial practices with regard to chromatic signs.[30] The chromatic signs furnished by Le Roy in the instructions may be divided into four categories:

1. the creation of a subsemitone at cadences
2. the inclusion of the subsemitone in noncadential passages
3. chromatic signs introduced for the avoidance of certain melodic and vertical dissonances
4. the lowering of the upper note in melodic leaps of a sixth.

Although all of the alterations required in these categories are specified in the instructions, many of the necessary signs were not notated in the chanson books. Fortunately, the missing information may now be supplied with a degree of certainty that is at present unparalleled in sixteenth-century studies. The examination of these uniquely interrelated sources yields the following comments on Le Roy's editorial practices.

1. In three of the chansons, Si le bien, Je l'ayme bien and Un doux nennin, the subsemitone is rarely designated in the vocal sources for cadence figures involving a suspension. This type of figure, which occurs twenty-three times in these three chansons, can be exemplified by mm. 37-39 of Si le bien (see Ex. 5). In this passage and nineteen similar ones, Le Roy evidently felt that the

N.B. Superscript signs indicate the pitch as it appeared in the chanson collections.


35
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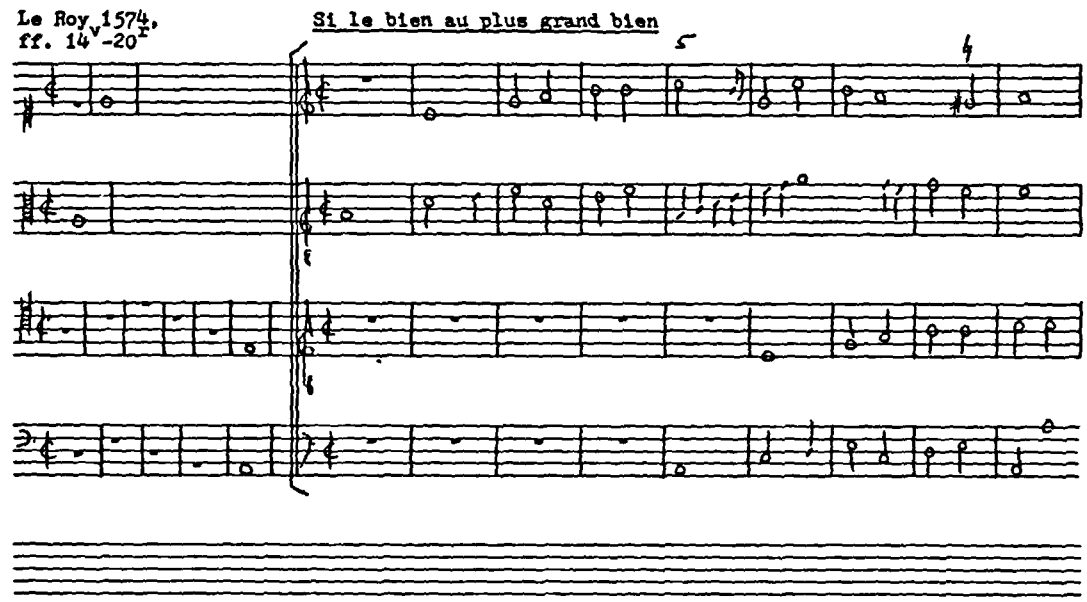
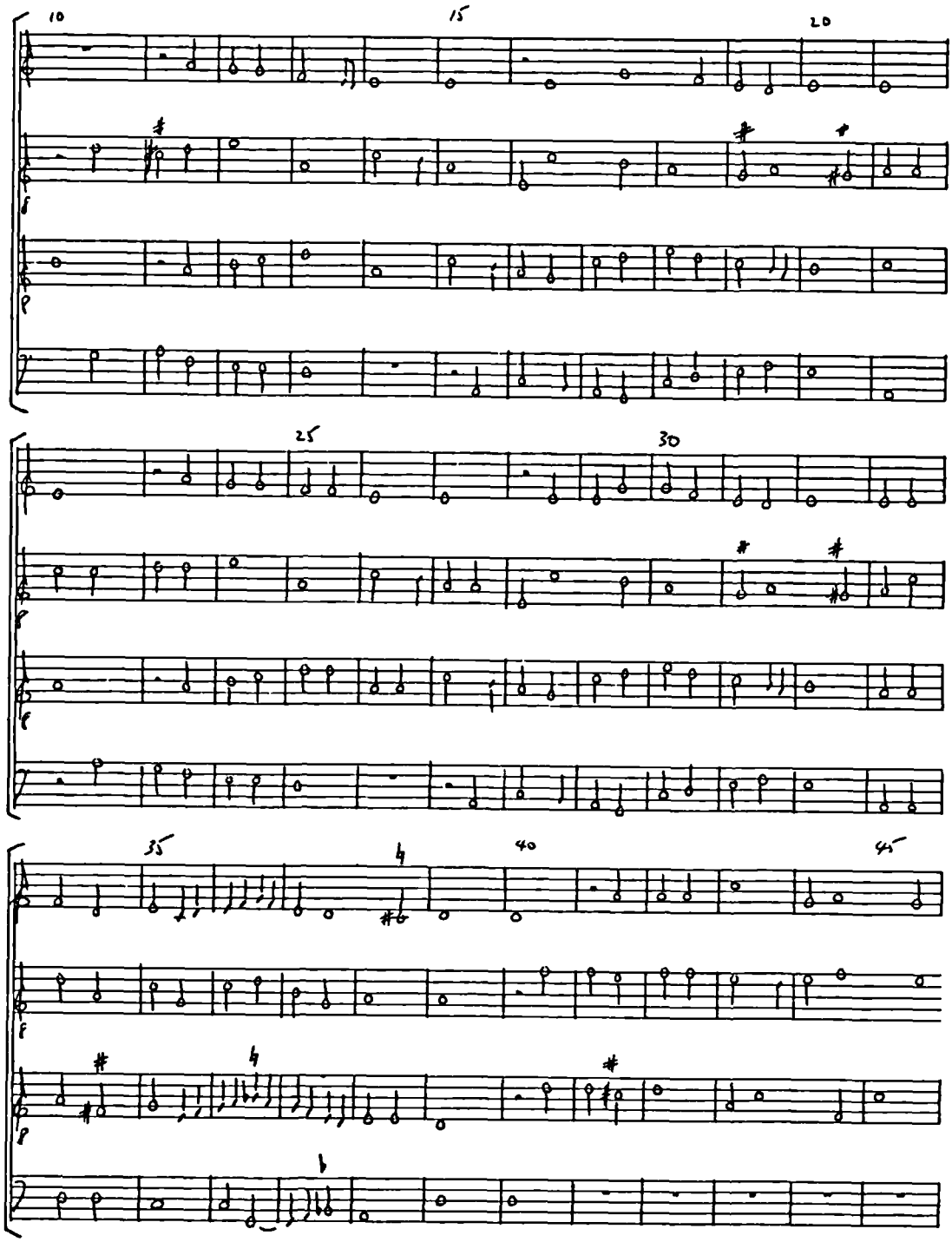
45


Le Roy 1574,
ff. 14v-20r
Si le bien au plus grand bien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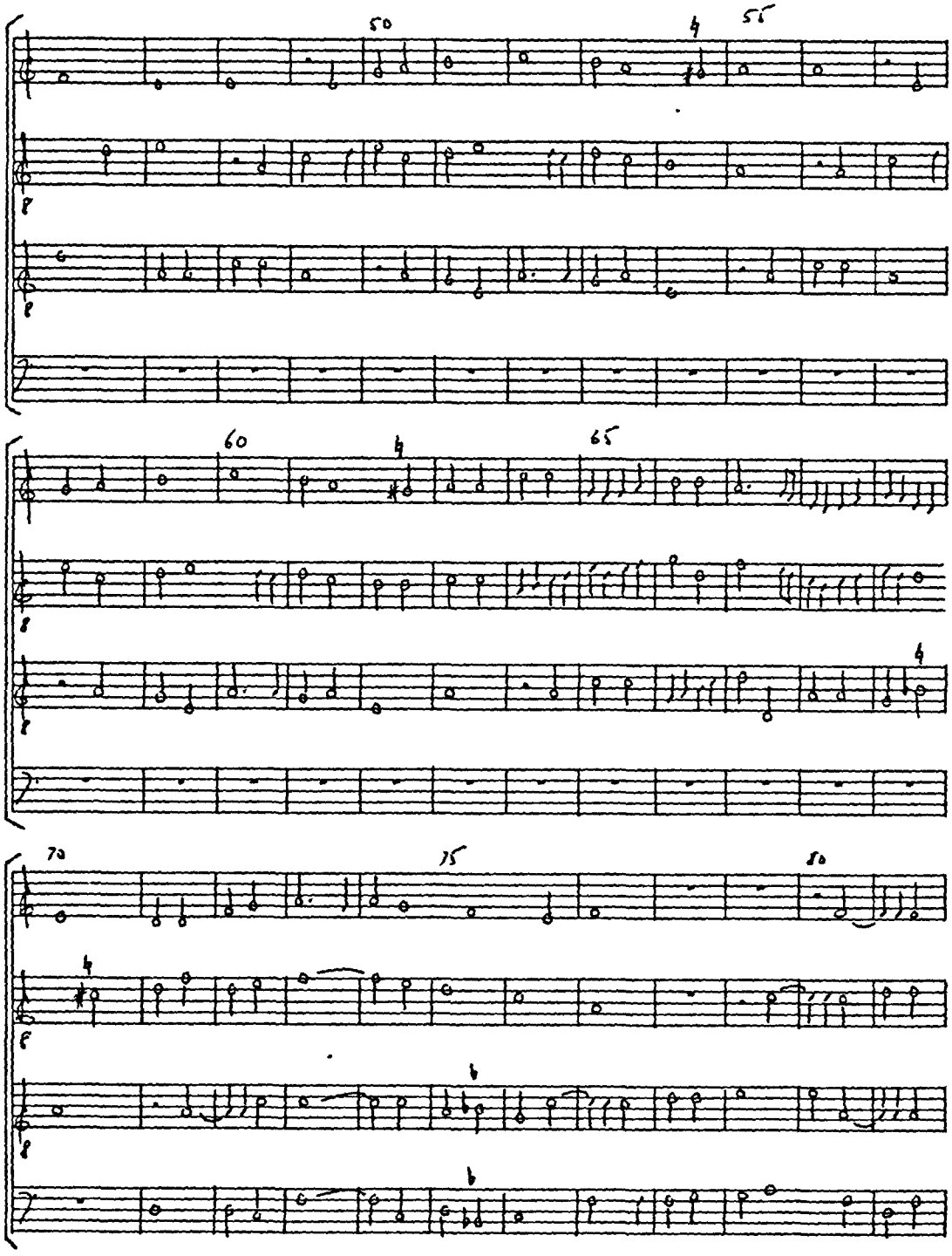
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Le Roy 1574,
ff. 23r-27v
Je l'ayme bien
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15
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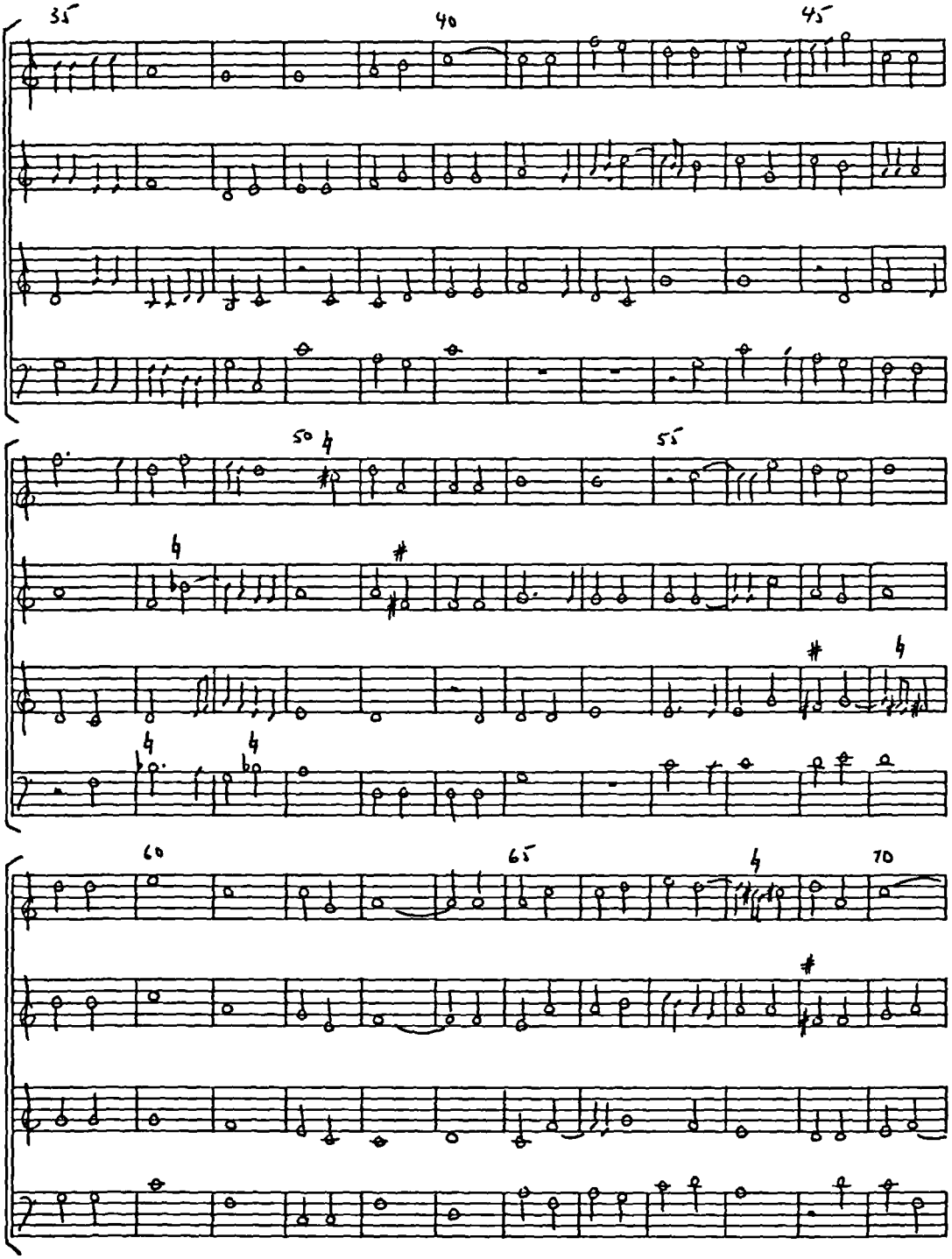
Le Roy 1574
ff. 30r-35r

Un doux nennin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75
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95
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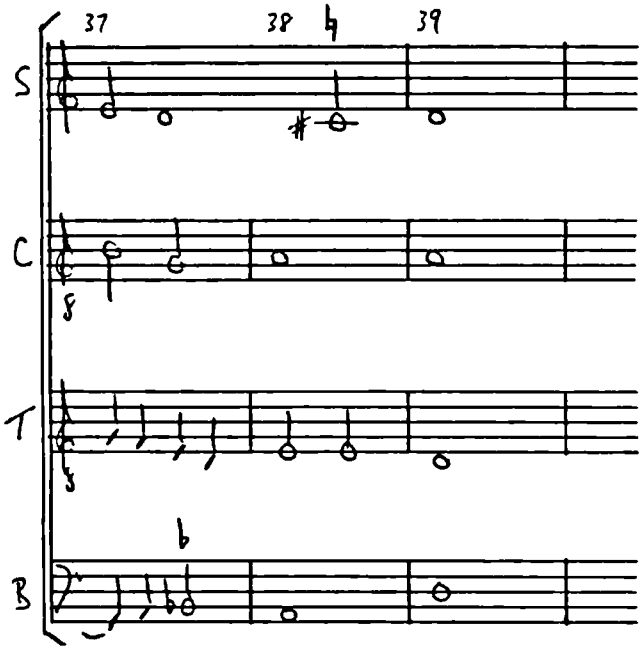
#[^]

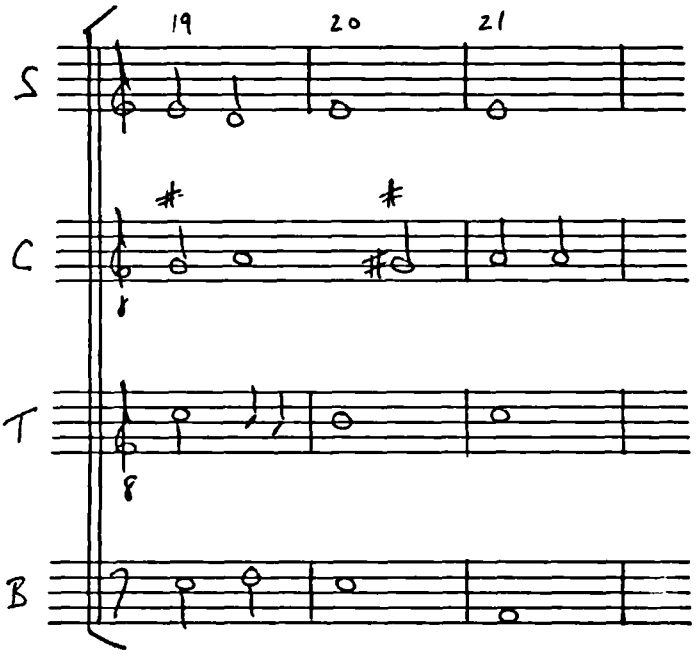
Ex. 5. Si le bien, mm. 37-39



N.B. Superscript signs indicate the pitch as it appeared in the chanson collections.

specification of a chromatic sign on the penultimate note of the cadence was superfluous. Of the twenty-three cadences containing a suspension, only three have a notated subsemitone. In two of these cases (the identical passages of Si le bien in mm. 19-21 and 31-33,[31] see Ex. 6), the subsemitone presumably would not ordinarily have been sung on the first G as it is precluded by the C in the tenor. Therefore, if Le Roy wanted to ensure the inflection of this note, he had to specify the pitch change. Interestingly, although a sharp is marked on the first G in the chanson-collections (see Ex. 6, m. 19), thereby introducing dissonance into the concentus, Le

Ex. 6. Si le bien, mm. 19-21.



Roy did not inflect this note in the lute transcription. This deviation from the vocal model is an intriguing example of the flexibility with which a Renaissance editor approached the question of pitch content in vocal sources. These divergent readings probably do not imply that stylistic differences existed between instrumental and vocal performance but rather demonstrate the variety of solutions that may be applied to particular problems. The specific difficulty in this passage is whether the subsemitone to the cadence-note A should be prescribed only for the penultimate note or whether it should also be prescribed for the previous G regardless of the effect on the concentus. In other words, the performer must decide which consideration should take precedence, that of the vertical sonority or that of the forward motion to the cadence-note. Intabulations throughout the period under discussion demonstrate that both solutions presented by Le Roy were commonly employed. Repeatedly, the multiple instrumental arrangements of single vocal works attest to the diverse levels of dissonance tolerance that Renaissance musicians possessed.[32]

2. In Quand mon mary, only one cadential subsemitone is specified in the chanson-collection (m. 11). At all other cadence points, the singers must make the required changes themselves. But this should be a relatively simple task as every cadence falls on the primary cadence-notes G or D and no complications arise from voices which might preclude the alteration (see Ex. 7 a-c). The sole cadence in which the addition of a subsemitone is not

Ex. 7 Quand mon mary, (a) mm. 3-4 (b) mm. 14-15
(c) mm. 29-30 (d) mm. 23-24.

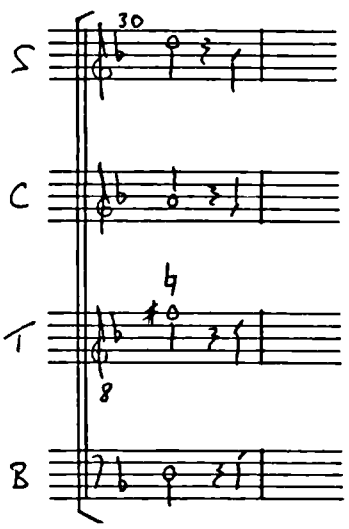
possible occurs in mm. 23-24 where Le Roy specifies an E^{b} in the bassus, thereby creating a Phrygian cadence on D (see Ex. 7 d).

3. Almost invariably, the chanson collections indicate which thirds above cadence-notes are to be raised.[33] These inflections normally occur at the close of sections and coincide with the line-endings of the text (see Ex. 8).

Ex. 8. (a) Un doux nennin, m. 76 (b) Je l'ayme bien, mm. 51-53

The single example of an unspecified raised third is found in Quand mon mary (see Ex. 9). This passage is consistent with the conditions, listed above, under which Le Roy customarily inflected the third and yet in at

Ex. 9. Quand mon mary, m. 30.



least one critical edition of the piece, no editorial emendation was suggested.[34]

4. Two further commentaries on the modern interpretations of the pitch content in these four chansons deserve mention at this time. The first pertains to the preclusion of the subsemitone in the bassus of Si le bien at m. 10 (see Ex. 10).

Ex. 10. Si le bien, mm. 7-11.

In this measure, the application of the subsemitone is prevented by the contratenor's D. But since this is the type of cadence figure for which Le Roy ordinarily expected the vocal performer to add the subsemitone, the singer is left in doubt as to which of the two previously mentioned considerations, vertical or melodic, should take precedence. Further difficulties arise on the realisation that in two later passages (mm. 19-21 and 31-33), where similar ambiguities might have occurred, Le Roy clearly marked his intentions by notating the required chromatic signs. Thus, the conflicting nature of the internal evidence within the chanson-collections prohibits a firm solution to the problem. But fortunately, external evidence from the fully-edited version in the instructions helps to clarify the situation. In this version, Le Roy avoids the tritone by retaining the G♭ and in contrast to the passages in mm. 19-21 and 31-33, the lute and vocal sources are identical. As a result, the editorial decision in the collected works of Arcadelt to add a sharp to the G may present a false reading of the passage.[35]

The second set of comments concerns the use of the subsemitone in avoided cadences. The particular section in question is found in Un doux nennin, mm. 30-31 (see Ex. 11). In this passage, Lasso constructed a cleverly avoided cadence which produces a fascinating dilemma for performers and editors. The main problem centres on the degree to which the

Ex. 11. Un doux nennin, mm. 29-31

performer should create the expectancy that a normal cadence formula will be executed. One method of heightening this anticipation, thus making the avoidance of the proper resolution more effective, would be to incorporate a subsemitone in m. 30 and it is this route that the editor of Lasso's collected works has chosen to follow.[36] However, Le Roy viewed this passage differently. Both the chanson collection and the instructions leave the C uninflected, thereby casting doubt on the necessity of inserting a subsemitone at this point.

5. In the vocal sources, the alteration of certain types of melodic and vertical dissonance was frequently left to the performer. Specifically, tritones and augmented octaves were to be eliminated both vertically and

melodically. In each case, this involved the lowering of the written note through the introduction of a flat. Example 12 presents a representative selection of the

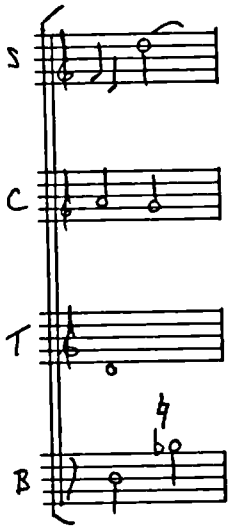
Ex.12. (a) Quand mon mary, m. 13 (b) Je l'ayme bien, m. 16
(c) Un doux nennin, mm. 47-48.

passages concerned. When Le Roy wished to deviate from this practice, he indicated his intentions precisely (see Ex. 13).

Ex. 13. Quand mon mary, mm. 44-45

6. The final category of chromatic signs to be considered involves those performance alterations that did not arise from the necessity of modifying dissonance nor from the need for creating a subsemitone cadence. For example, the leap of a major sixth, which was regarded as a difficult interval to sing,[37] was lowered in Un doux nennin (see Ex. 14) and frequently, certain

Ex. 14. Un doux nennin, m. 15.



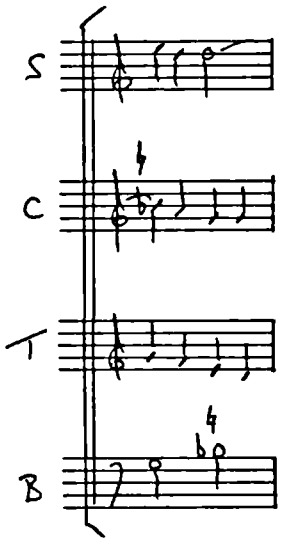
other notes were altered probably through the fa supra la convention[38] (see Ex. 15).

Ex. 15. (a) Si le bien, mm. 35-39 and 69[39]

(b) Un doux nennin, mm 9-10.

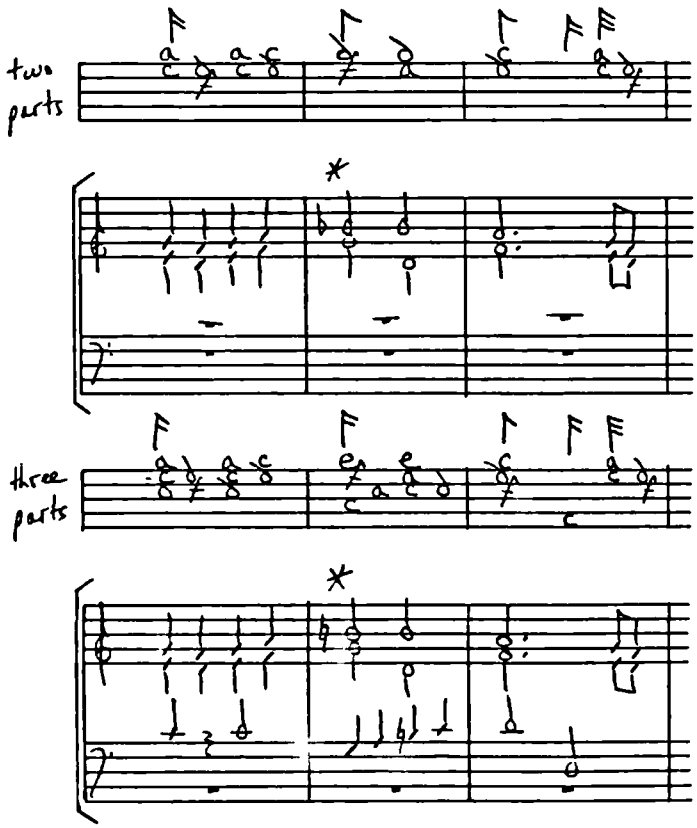
At times, the application of this convention created dissonance not present in the chanson-collections (see Exs. 15a and 16). But in all three instances cited, the dissonance is of such momentary consequence that evidently it was deemed tolerable by Le Roy.

Ex.16. Un doux nennin, m. 49.



7. Le Roy's method of intabulating one part at a time was a laborious process in which constant adjustments had to be made on the addition of each new voice. As mentioned earlier, these modifications mainly involved adapting the tablature rhythm signs to the requirements of the extra parts. However, the changes were not restricted to rhythmic notation because, on at least one occasion, the need for pitch readjustment was not apparent until the final part had been incorporated. In Si le bien (see Ex. 17), Le Roy at first added an unspecified B^{b} to the superius only to be forced to abandon this alteration on the realisation that the contratenor must retain its $B\flat$.

Ex. 17. Si le bien, mm. 65-67.



In order to avoid this problem of adjusting the chromatic signs for successive layers of voice parts, Hans Gerle took another approach. He first intabulated the entire vocal model as notated in the vocal source and then added to the final performing version of the piece whatever signs were necessary. Gerle's example of intabulation — method demonstrates the technique (see above, p. 19 and Ex. 18). In this example, the only pitch alteration required in the final version is the creation of a subsemitone to the cadence-note G (see Ex. 18).

Ex. 18. Scaramella (Gerle 1546, ff. c^{v}-$c2^{r}$), mm. 8-9 and 11-12.

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The importance for this dissertation of the preceding discussion of intabulation techniques is that it reveals the care taken by the instrumentalist to produce an accurate transcription of the vocal model. As such, the arrangements of skilled intabulators represent versions in which the instrumental performer grappled with the same problems of ambiguous pitch content that any Renaissance Kapellmeister would have encountered. Moreover, the technique of converting mensural notation into tablature notation forced the instrumentalist to adopt the singer's melodic approach to the music. This melodic interpretation of the vocal lines was then tempered by the constraint of the other parts whereupon horizontal considerations had to be balanced against vertical ones in order to reach solutions to vexatious problems. The theoretical framework available to the Renaissance musician for surmounting these problems would have been identical for both the singer and the instrumentalist. Thus, as the comparative study of Le Roy's lute versions with his own printed vocal sources demonstrates, intabulations are indeed a useful guide to the parameters of the sixteenth-century practices discussed in this dissertation.

CHAPTER III

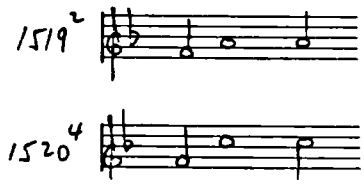
THE INTABULATIONS AND THEIR MODELS

The study of filiation within fifteenth- and sixteenth-century musical sources has received increased attention in recent years.[1] Largely, the advances made in this area have centred on the production of stemmata for vocal sources, leaving the whole issue of the filial relationship between intabulations and their vocal models untapped. While the methodology of producing stemmata has grown rapidly in sophistication, the endeavour of tracing the source from which an intabulator might have prepared his transcription finds its beginning in this dissertation. The value of pursuing this new line of investigation reveals itself in three ways. In the first place, for those intabulations where it is possible to identify the text from which the instrumentalist worked, one can learn how a Renaissance performer interpreted the materials at his disposal. Secondly, this type of study discloses which versions of a given work were known by individual musicians. If enough of these instrumental arrangements are examined, they can help to pinpoint geographically and chronologically the dissemination of what otherwise might have been considered a localised sub-tradition. And finally, unique variants within the tablature sources may point toward vocal versions no longer extant, thereby broadening our awareness of the number of sources that have been lost.

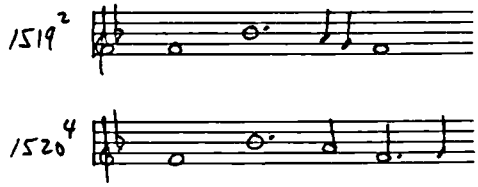
The main approach employed in the identification of vocal models is the study of variants. Although it may not be possible to state with complete confidence that any particular source was the one actually used by the instrumentalist, certain significant variants which appear in both the vocal and the instrumental sources reinforce the probability that a connection between two sources exists. The importance of these significant variants as tools for testing this connection depends upon whether or not one believes that two people could independently generate an identical series of emendations. The types of significant variants upon which the discovery of the vocal model invariably rests may be categorised as follows:

1. Deviations in pitch and/or rhythm of an editorial nature.

Examples: (a) Stabat Mater, I 62, superius.



(b) Stabat Mater, I 23-24, superius.



2. Other minor editorial changes which, for instance, affect the entries of the voices in imitative passages.

Example: Pater noster, II 48-62, quinta vox.

3. Major editorial changes that either add or delete material.

Example: Pater noster, I 17-21, bassus.

4. Chromatic signs stipulated in some vocal sources but not in others.

However, since the intabulators introduce so many of their own chromatic signs as a matter of course, this type of variant is best used in a supporting role.

The motet sources contain numerous variants which are of little or no value to the present study. These variants, which frequently prove indispen able for other kinds of filiation discussions, include:

1. The physical layout of the page.

2. Notational differences which do not alter pitch or rhythm.

Discrepancies in the use of ligatures, minor coloration, etc., within the vocal sources are not detectable in tablature notation.

3. The breaking of longer notes into shorter values, for example, a breve divided into two semibreves.

Since the division of longer notes into shorter ones forms part of normal intabulation procedure, it is impossible to trace any such variant in a tablature source back to a particular vocal source.

4. Changes in decorative cadence figures.

Cadential ornamentation within the intabulations themselves often masks the structure of the model, thus eliminating this type of variant as a useful tool.

5. Alterations to the text.

For many of the sources, the conflicting nature of the variants between the intabulations and the extant vocal models renders the study inconclusive. Furthermore, the identification of the correct model becomes increasingly difficult when one realises that even though it is a relatively simple task to isolate those variants which are pertinent to this study, ornamentation within the intabulations frequently obscures the relevant passages, thereby making comparisons impossible. However, in a number of cases, the evidence does suggest that a filial relationship may exist between specific intabulations and certain vocal sources. The ensuing study, based on variants that have been collected for five of Josquin's motets,[2] represents the initial step in this new direction.

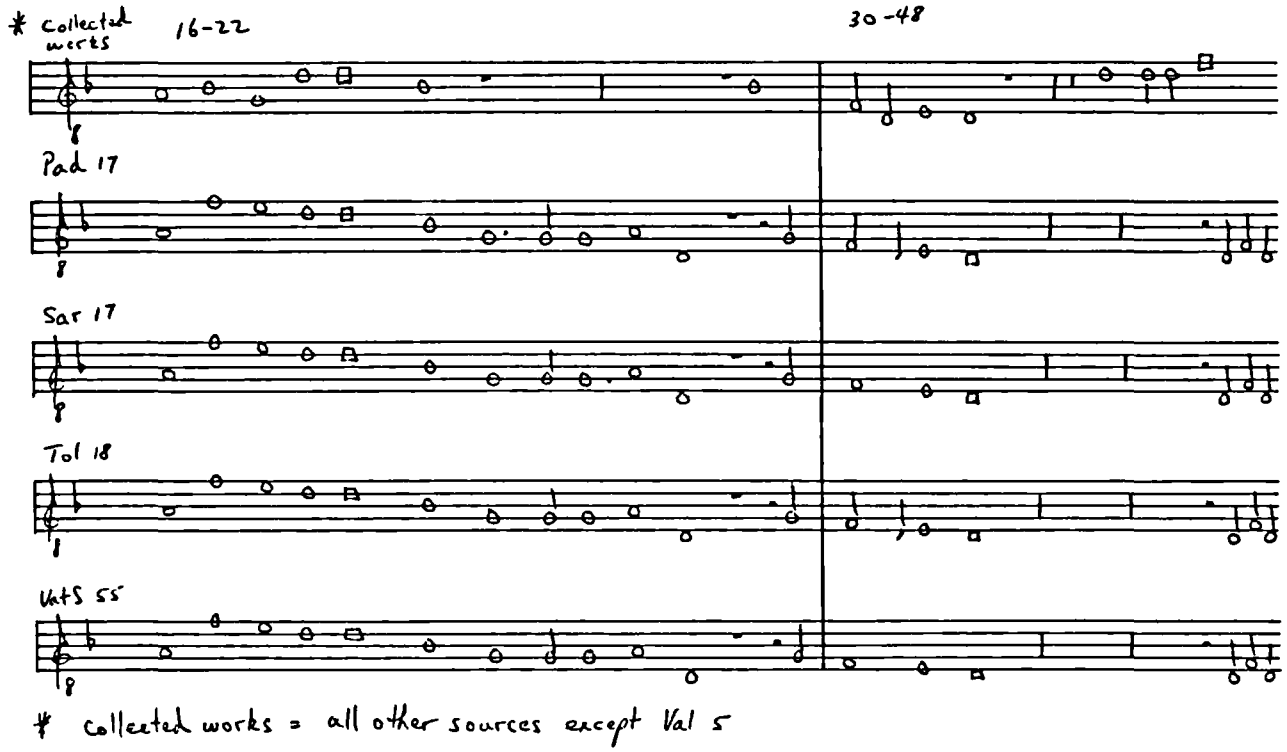
Pater noster

The most interesting and potentially the most useful variants in Pater noster materialise in the quinta vox of the secunda pars. In this voice, a series of both major and minor editorial changes within five of the vocal sources provides the best starting point for tracing the model (see Ex. 1). The largest of the emendations occurs in mm. 16-22 and 30-46 whereas those modifications in mm. 48-69 represent minor alterations that momentarily delay each entry of a repeated phrase. The unique combinations of these major and minor revisions in the five sources make the quinta vox the decisive factor in

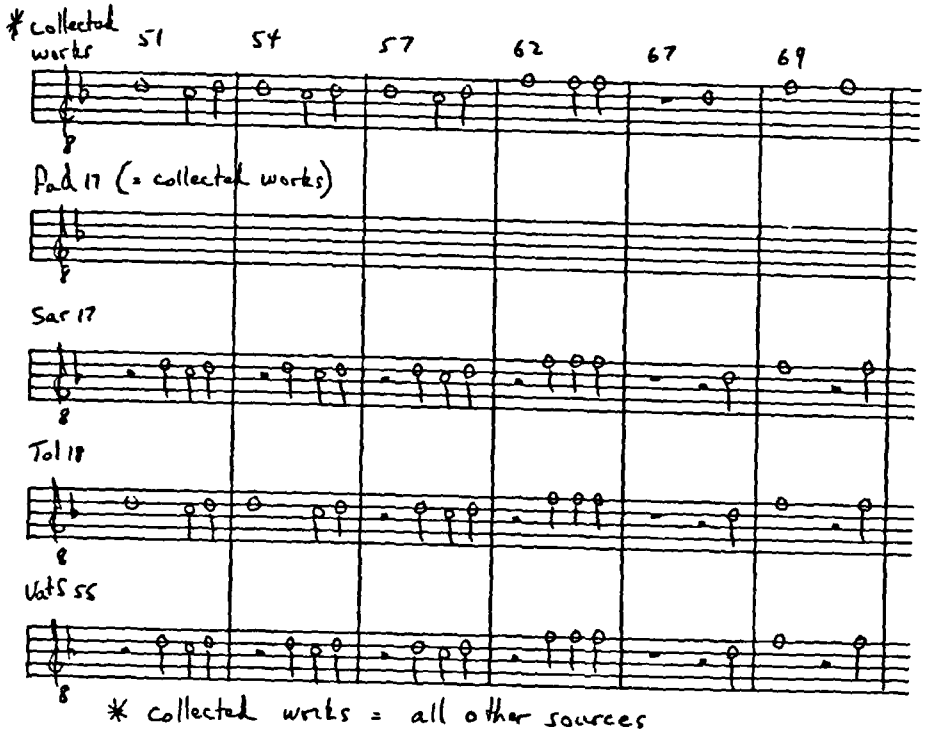
detecting the model. For example, the possibility is probably quite slim that any of the instrumentalists could modify the entries of the voices in mm. 48-57 in exactly the same inconsistent way that appears in Tol 18 and, similarly, it is doubtful that anyone could duplicate the variants in Pad 17 without actually using that source.

Indeed, a comparison between the intabulations and the quinta vox bears fruit in three cases. Simon Gintzler, Enriquez de Valderravano and Sebastian Ochsenkun prepared their arrangements from sources that were aligned with the branch of the stemma comprising Pad 17, Sar 17, Tol 18 and VatS 55. Specifically, the Gintzler

Ex. 1 Variants, Quinta vox, secunda pars

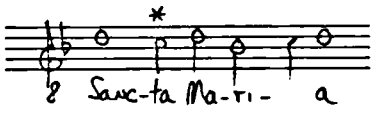



collected works
Pad 17
Sar 17
Tol 18
Vats 55

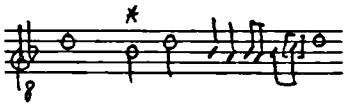

* collected works
51
54
57
62
67
69
Pad 17 (= collected works)
Sar 17
Tol 18
Vats 55
* collected works = all other sources

intabulation parallels Pad 17 and the Valderravano arrangement, Tol 18; for Ochsenkun's transcription, however, an excess of conflicting variants prevents us from narrowing the field any further although VatS 55 merits consideration. In neither of the first two cases, however, can the discussion proceed without resorting to the creation of hypothetical vocal sources.

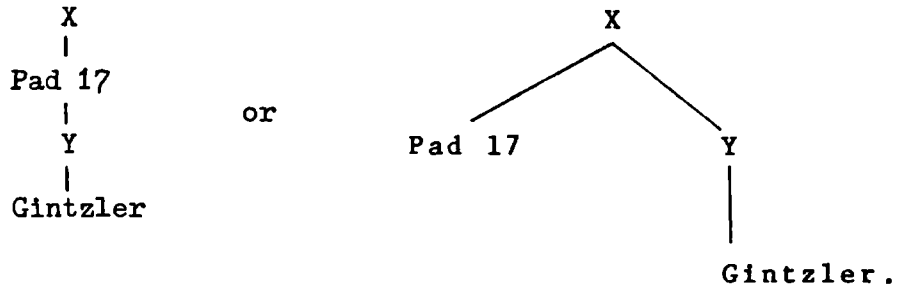
The closest relationship with Pad 17 occurs in Gintzler. His intabulation, in addition to matching the quinta vox (secunda pars), mirrors all of the significant melodic variants in Pad 17.[3] But another source very similar to Pad 17 may once have existed and may have been used by Gintzler to prepare his transcription. Two disparities in the quinta vox suggest this hypothesis.[4] Between mm. 48 and 58 in the secunda pars, the fragment



. is repeated four times. In the Gintzler print, however, this phrase is altered to

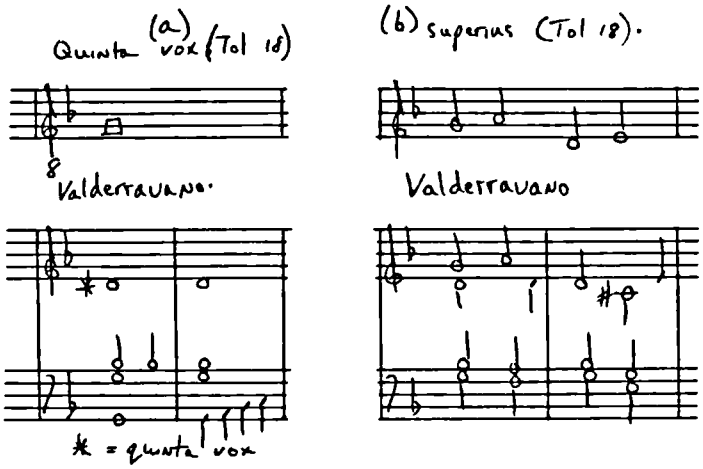


in measures 51 and 54. No musical or technical grounds for this modification (marked with an asterisk) has been discovered, and it seems reasonable to assume that this alteration appeared in Gintzler's model. As a result, the transmission may have been:



A similar pattern emerges for the Valderravano intabulation. The quinta vox (secunda pars) establishes Tol 18 as the most likely extant candidate for the model, and the justification for this belief centres on the fact that, as mentioned above, it is highly improbable that Valderravano, through his own predilection, could have formulated the same inconsistent editorial emendations as appear in mm. 48-57 of the Toledo manuscript.[5] But certain discrepancies point to the existence of a lost source, because Valderravano either introduced several alterations himself or worked from a source closely related to Tol 18. In m. 4 of the quinta vox (secunda pars), Valderravano clearly employed the variant D rather than the G of Tol 18 (see Ex. 2a); and in m. 61 of the superius (secunda pars), the rhythm 𝅗𝅥 𝅗𝅥 𝅗𝅥 𝅗𝅥 was altered by Valderravano to 𝅗𝅥 𝅗𝅥 𝅗𝅥. 𝅘𝅥, which corresponds to variants in Pad 17 and VatS 55 (see Ex. 2b). Furthermore, Tol 18 stipulates E^{b}s in mm. 48, 51 and 76 (secunda pars) none of which were incorporated by Valderravano. The intabulation, then, may have been prepared from a source now lost.

Ex. 2 (a) Pater noster, II 4 (b) Pater noster, II 61.



The Ochsenkun intabulation, which belongs to the same branch of the stemma but for which the precise model cannot be ascertained, demonstrates that the dissemination of the version encompassing Pad 17, Sar 17, Tol 18 and VatS 55 was not confined to Italy and Spain, as the surviving vocal sources might suggest, and shows that it was also known in Germany.[6] Although no models have been identified for the remaining intabulations, by Francesco da Milano, Pierre de Teghi and Antonio de Cabezon, the variants prove that none of the intabulators knew the version in Gotha 98. The accretions to the quinta vox and to the bassus in mm. 17-21 of the prima pars make this clear (see Ex. 3).

Ex. 3. Pater noster, I 17-21.

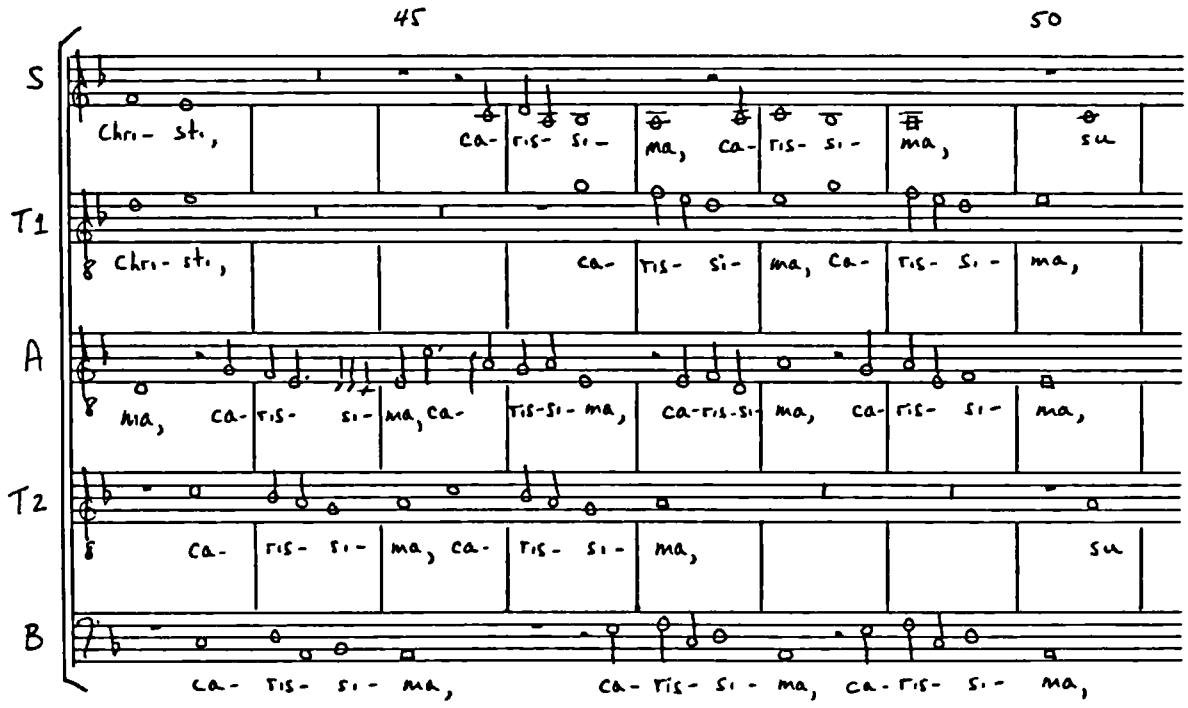
Inviolata

An intriguing anomaly in one of the vocal sources of Inviolata, the Liber selectarum cantionum (Augsburg, 1520[4]), provides the mechanism for tracing the intabulators' models and points to the existence of two performing traditions associated with the prima pars of this motet. The extant intabulations document both traditions and fully attest to the divergent readings of this work that were known in the sixteenth century. The specific irregularity in the 1520[4] print concerns the disappearance of the signature, a B^b, in the closing measures of the prima pars. In all voices except the tenor secundus, the signature ceases to be present from m. 39.[7] Apparently, the editor of the 1520[4] print felt that for four of the voices the signature could easily be omitted at this point, owing to the number of vertical tritones between E and B^b that performers would have to alter anyway.[8] But in the tenor secundus, the editor had to retain the signature because a B^b is required in m. 44 to avoid the tritone with F (see Ex. 4). Josquin subsequently repeated the phrase containing this B^b three times (mm. 45-47, 56-58 and 58-60) and on each of these repetitions the desire for an exact duplication of the fragment necessitated the incorporation of the flat and, thus, the retention of the signature.

For the most part, Hans Gerle and Sebastian Ochsenkun adhere to the new signature, thereby affiliating

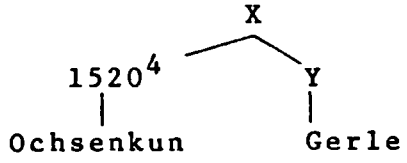
themselves with the 1520[4] print. With the exception of mm. 44-48 (to be discussed below), both of the German lutenists render each B occurring after m. 39 (in a voice other than the tenor secundus) as a B♮. But for each occurrence of a B within the tenor secundus (the only voice with a flat in the signature at this point, see mm. 44, 46, 57 and 59), Gerle and Ochsenkun indicate a B♭, thus preserving the exact reduplication of the fragment.[9]

Ex. 4 Inviolata, I 43-50.



However, Gerle and Ochsenkun radically depart from the 1520^4 version in mm. 44-48 (see Ex.4). In fact, all of the intabulators stipulate flats for each B in this passage. The logic behind this treatment stems from two factors which tend to govern this entire section--one, the B^b in the tenor secundus of mm. 44 and 46 (discussed above) and the other, the B^b required for the Phrygian cadence in mm. 44-45. Evidently, it was necessary to reproduce the Phrygian motion of the bassus (B^b to A) in the superius at mm. 46 and 48 even though this created a tritone with the bassus in each case.

Additional support for the belief that at least Ochsenkun had access to the 1520^4 print arises from the geographic proximity of the two centres of production for these sources, Augsburg and Heidelberg, and from the significant variants contained in the vocal sources of Inviolata.[10] For each of these important variants, Ochsenkun followed the reading in 1520^4 whereas Gerle deviated from this source on four occasions (superius, I 54-55; altus, I 34 & 44 and II 16). For Gerle, then, the tradition was probably transmitted through a source now lost:



On the other hand, with the exception of m. 40,

where all the intabulators avoid the tritone with E, Enriquez de Valderravano stipulates B^{b}s throughout this section, indicating that he was bound to the tradition transmitted in the other extant sources. In essence, Cabezon also forms part of this tradition, although he is inclined to raise those B^{b}s occurring in ascending passages (see Ex. 5). But unfortunately, beyond this general demarcation, it has proved impossible to identify the specific sources from which Valderravano and Cabezon worked.

Ex. 5. Cabezon intabulation, mm. 55-56

Thus, two performing traditions seem to have existed for Inviolata--one derived from the model for the 1520[4] print and the other from the remaining sources.

Stabat Mater

The significant variants in the vocal sources of Stabat Mater permit the identification of the most probable model in one case only, that of Sebastian Ochsenkun.[11] The three German printed versions of Stabat Mater, 1520[4], 1538[3] and 1559[1], contain identical melodic variants, and it is likely that Ochsenkun had access to a source aligned with this complex. Three decisive variants incorporated by Ochsenkun determine this assignation (see Ex. 6a). However, two other equally important factors point, once again, to a lost source that must have been closely related to these prints (see Ex. 6b).

Ex. 6. Significant variants in Stabat Mater

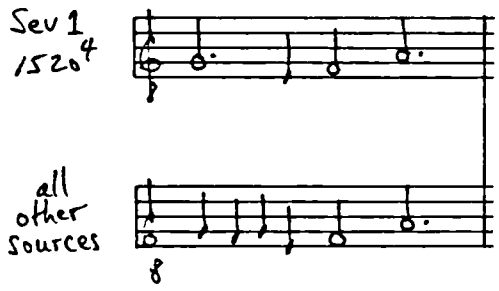
Although these two modifications are present in other vocal sources clearly associated with the reading in the German prints, no extant source contains the particular

combination of significant variants found in Ochsenkun's intabulation (that is, Ex. 6a plus 6b). Therefore, the suggestion of a missing source which embraces all five of these variants seems tenable.

Benedicta es

The most promising variant in Benedicta es for tracing the intabulators' models occurs in the tenor part. At m. 66 in the prima pars, all of the extant vocal sources except two, Sev 1 and 1520[4], contain the following variant:[12]

Ex. 7. Tenor, I 66.

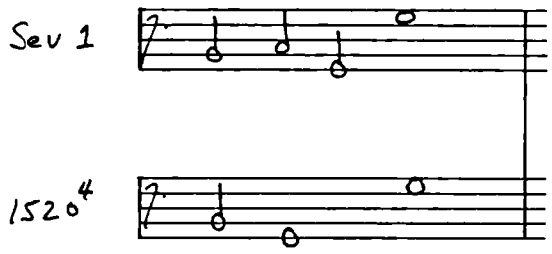


The absence of this variant in any of the intabulations should, then, substantially reduce the range of options open to the investigator. Intriguingly, two of the eight intabulators, Miguel de Fuenllana and Sebastian Ochsenkun, omit this alteration, thereby increasing the likelihood that these two performers had access to sources

related to Sev 1 and 1520^4.

It is no surprise that the 1520^4 print has yet again been associated with Ochsenkun, as the connection between this print and the German lutenist figured prominently in the preceding discussions of Inviolata and Stabat Mater. The Fuenllana arrangement, however, was probably not prepared from 1520^4 but rather from Sev 1 or from a source related to it. One major discrepancy between the print and the manuscript confirms this statement. The sexta vox (prima pars) contains the only inconsistency between the two vocal sources (see Ex. 8)

Ex. 8. Sexta vox, I 6.



and Fuenllana clearly follows the reading in the Seville manuscript. Consequently, 1520^4 can be eliminated as Fuenllana's model. In addition, the intabulation matches Sev 1 in all essential details, and the geographic proximity of intabulation and model, one printed in Seville and the other copied there, justifies the speculation that a direct link between the two may exist. Fuenllana's arrangement was printed in 1554, and it has

been suggested that Sev 1 was copied in Seville around 1560 for use by the cathedral choir.[13] Since it is likely that Fuenllana was in or near Seville during the 1550s,[14] there is a strong possibility that he actually consulted Sev 1. If this is true, then the manuscript must have been copied prior to 1554.

* * * * * * * * *

The preceding investigation of the filial relationships between the intabulations and their models has contributed to our knowledge of sixteenth-century music sources in several ways. First, a number of lost or missing sources for the motets has been exposed. Second, the dissemination of one branch of the stemma for Pater noster has been pushed beyond Italy and Spain. Third, two performing traditions surrounding Inviolata have been disclosed. Fourth, a plausible terminus ante quem for the manuscript, Sev 1, has been proposed. And finally, a number of the intabulators' models has been suggested.

CHAPTER IV

THE THEORETICAL FRAMEWORK SURROUNDING THE INCORPORATION OF CHROMATIC SIGNS

The theoretical guidelines governing the sixteenth-century musician's approach to the application of chromatic signs survive in a number of treatises dating from the late fifteenth to the early seventeenth centuries. Unfortunately, no one author treats the subject exhaustively and if the parameters of the practices are to be established, isolated statements must be gleaned from treatises written throughout this period. These treatises deal with a variety of subjects and types of music and yet the information contained in them regarding the use of chromatic signs, treatment of dissonance, etc., is consistent with the practices exhibited in the intabulations of Josquin's motets.

The comments in the treatises directed to these matters occasionally present conflicting viewpoints and no consensus exists either in the treatises or, as will be shown in the next chapter, in the approaches taken by performers. So rather than search for definitive statements which can be moulded into a convenient group of rules universally applicable to all situations, this chapter will emphasise the inherent flexibility which actually pervaded the theorists' remarks. Apparently, these comments applied to instrumentalists as well as singers, for no author known to this writer mentions the

existence of a separate theoretical system for instrumentalists. In fact, two theorists specifically state that their remarks govern both groups of musicians. Juan Bermudo and Tomas de Sancta Maria make this clear. At several points in his treatise, Bermudo asserts that his discussion of theoretical principles pertains to either singing or playing[1]; later in the century, Sancta Maria echoes Bermudo's contention by asserting that "... what is unsingable may not be played."[2] Since the theorists did not differentiate between singers and players, the precepts outlined in their treatises have a direct bearing on the practices encountered in the intabulations and will therefore form the basis for explaining the instrumentalists' procedures.

Any sixteenth-century performer who had worked with contemporary vocal sources would have been familiar with the notational ambiguities that permeated the vast majority of manuscripts and printed books. Many of the required chromatic signs were not specified in these vocal sources, and the final shaping of the music in both harmonic and melodic content was left to the performer. As a result, certain details of modal procedure were never notated. For example, since the performer decided whether or not to add a subsemitone at primary and secondary cadences, the hierarchical function of these structural points was not always specified by the composer. Further notational ambiguities emerged when conflicts occurred between the desire to strengthen the

cadential articulation and the need to avoid certain vertical dissonances, as in cases where the introduction of the subsemitone might have been precluded by the creation of a tritone with an upper or lower voice. But despite these problematic passages, some theorists regarded the specification of the subsemitone as unnecessary:

> "...sharps for the subsemitone in cadences should be written exclusively for beginners who want everything spelled out."[3]

Other matters, such as the removal of vertical and melodic dissonance, were also left for the performer to resolve. In fact, some theorists considered the avoidance of the melodic tritone in modes five and six to be such a matter of routine that the mandatory sign did not need to be notated:

> "Nor then is it necessary that the sign of the soft b be added [to remove the tritone]; rather, if it is seen to have been added, it is said to be asinine."[4]

Yet not all writers shared the view expressed by Vanneus and Tinctoris that composers could rely on performers to correctly supply the information missing from the vocal sources. Several theorists, recognising the inadequacy of contemporary notational practices, called for composers to mark their intentions fully. Pietro Aaron, in the Aggiunta to his Toscanello, states the position most clearly:

> "It will now be considered whether the singer should or indeed can recognize at once the intent and secret of a composer, when singing a song he has not seen before. The answer is no, although among those who celebrate music there are some who think contrary."[5]

He later expands this discussion by comparing the problems of ambiguous notation to the sign-posts encountered by the traveller:

> "... in travelling one sees places where there are various signs, because there are several roads one might take. By means of these signs those who do not know the country may correctly choose the right road. If there were no sign, they doubtless might choose the wrong road, ... Thus the musician or composer is obliged to show his intention so that the singer will not stumble into something the composer did not intend ... And this is to be understood also in songs that are not being sung for the first time."[6]

These sentiments were echoed in the 1550s by both Juan Bermudo and Nicola Vicentino[7]; as late as 1619, theorists were still imploring composers to precisely notate all of the chromatic signs required by the music:

> "... the best precaution would be for composers, in all places in which they [chromatic signs] are needed, to write them out, so that there would be no doubt or uncertainty as to their being needed."[8]

Nevertheless, even when these signs are notated in the vocal sources, the jurisdiction of each sign is not always obvious, and many of the theorists' statements regarding chromatic signs do little to clarify individual

problems. Ornithoparchus' vague comment, that "As often as fa or mi is marked contrary to their nature [that is, a flat or sharp placed where thay would not normally occur], the Solfaer must follow the marke so long as it lasts,"[9] sheds little light on the matter. And although Tinctoris differentiates between a flat that is used as a signature and one that is used as a chromatic sign, he does not state explicitly how long a flat, once introduced, remains in effect:

> "...if it [the soft b] is placed at the beginning of the line, [it defines that] the whole song (cantus) will be sung with a soft b. If, indeed, it is placed in any other place, as long as the section (deductio) will last in which it is prefaced, the song will be [sung] with soft b ..."[10]

Hans Gerle, on the other hand, offers much more precise information on the subject:

> "Now, other fa's are written in song; as I have shown before, they lie inside the song [as chromatic signs], and not at the beginning [in the signature]. When the same fa's appear in the song, they belong only to the notes following right after the fa's, and not to the other notes; for as soon as the same note is over, then the fa no longer concerns the other notes lying on that line or in that space. A separate fa, then, is written for each."[11]

But despite his unequivocal description of the practices surrounding flats, few of the vocal sources that survive from his lifetime (c. 1500-1570) are as specific as Gerle imagines them to be. Typically, the

mensural sources of Josquin's motets merely outline the pitch content of the works because most of the required chromatic signs had to be supplied by the performer.

But what theoretical principles guided the performer and how are these precepts discussed during the period under consideration? The information collected from the various treatises has generated three main areas to be considered--the treatment of cadences, vertical dissonance and melodic dissonance. This organisation of the material represents a modern reconstruction of the theoretical framework that would have been accessible to the sixteenth-century musician.

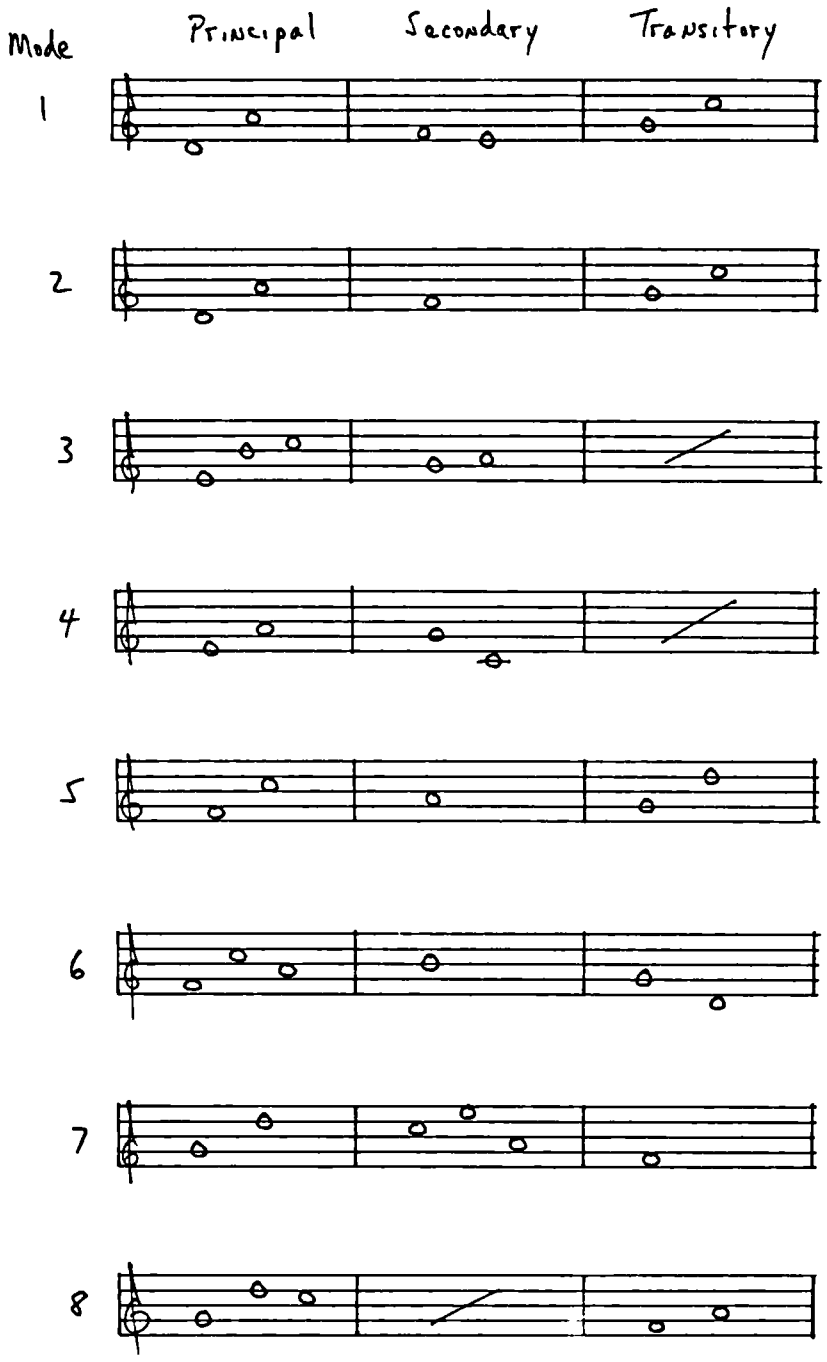
Treatment of Cadences

Ornithoparchus, citing Tinctoris as his authority, defined a cadence as any part of a song which ends in perfection or, in other words, ends with the conjunction of the various voices in perfect concords.[12] This basic definition was known throughout the century and by the mid 1500s, certain theorists, such as Gioseffe Zarlino, provided a more elaborate discussion of the term.[13] Zarlino described the cadence as a resting-point which, in vocal music, paralleled the close of a significant portion of the text. He maintained, however, that the cadence should not be restricted to merely separating main segments of the text but might also be used at mid-points and for demarcating sections of the music apart from the text. Zarlino equated the cadence

in music with the period (full stop) in prose, observing that the cadence might be used in the same way that one pauses in a speech, both at intermediate points and at the end.[14] He advised that the cadence should not always fall on the same note but that, for the sake of a more pleasing harmony, the location should be varied. Nonetheless, any cadence which coincided with the end of a sentence in the text ought to be placed on one of the proper steps of the mode.

Theorists from the sixteenth century often discussed the modal degrees available for cadences in hierarchical terms. This hierarchy was presented as either a bipartite or tripartite scheme but, for our purposes, it will be discussed as a three-part order. The primary or principal cadence-notes constituted the main foundations of the mode and were derived from the notes bounding the species of fourths and fifths and from the repercussion tones. Secondary cadences could be inserted without disturbing the mode but were not part of the mode's structural foundations. And finally, occasional transitory cadences were formed on notes foreign to the mode. Although some difference of opinion existed on which notes were permissible in the secondary/transitory area, the hierarchy may be summarised in the following chart:[15]

Ex. 1. Cadence-notes .



Zarlino informs us that all cadences formed on a unison or on an octave must be approached from the closest imperfect consonances and therefore must incorporate the subsemitone. Furthermore, he contends that for the cadence-notes where the subsemitone does not occur naturally, for example G, a chromatic sign does not need to be notated "... because each voice that ascends to the final is intended to have the subsemitone, ... Nature has taken care of this, for not only do expert musicians but also peasants without proper musical training sing this semitone."[16] Zarlino's observations have a long and illustrious ancestry dating back to at least the 1430s. Ugolino of Orvieto, in his Declaratio Musice Discipline, states:

> "... every imperfect consonance or dissonance should approach perfection as closely as possible ... For example, this next sixth ought to be not
> c-fa d-sol but c♯-mi d-fa
> E-mi D-re E-mi D-re
> to bring it closer to the perfection [of the following octave] ..."[17]

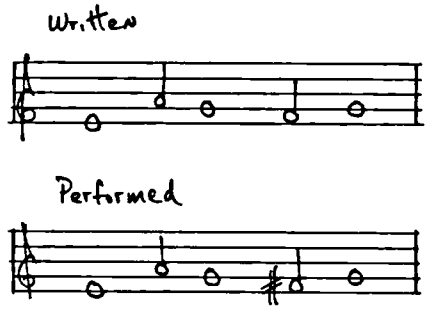
Three other theorists prior to Zarlino--Gaffurius, Ornithoparchus and Bermudo--confirm that the knowledge of this precept was widespread. Bermudo's remarks on the subject are representative of the manner in which the precept was discussed:

> "The nearest perfect consonance always follows the two imperfect consonances [third and sixth], that is to say, the unison [follows] the imperfect third [minor third], the fifth the perfect third [major third], and the fifth the imperfect sixth [minor sixth], and the octave the perfect sixth [major sixth]."[18]

Bermudo then goes on to amplify his comments: "All of what has been said above is carried out not only in the cadence but whenever the perfect consonances are approached, in any manner whatever."[19] Indeed, as late as 1619, the use of the subsemitone at cadences where it was not marked was still being advocated:

> "With the Clausula formalis [cadence] each Cantor [singer] and Musici [instrumentalist] must sing and use the semitonium."[20] (See Ex. 2)

Ex. 2. The subsemitone in clausulae formales.



But not all theorists agreed that every cadence had to incorporate the subsemitone. Sancta Maria, for example, divided cadences into two types--those that were remisso and those that were sostenido. The remisso or 'relaxed' cadence employed a subtone and was solmized mi re mi and the sostenido or 'sharped' cadence employed a subsemitone and was solmized fa mi fa.[21] For each of the eight modes, Sancta Maria categorised the cadence-notes as clausula final, clausula media or clausula passo and designated them either remisso or sostenido. A synopsis of his classification appears in the following chart.

Ex. 3. Remisso and sostenido cadences.[22]

[S = sostenido; R = remisso]

Mode	Clausula final		Clausula medio		Clausula passo	
1	Dsolre	S	Alamire	S	-	
2	Dsolre	S	Ffaut	S	Alamire	R
3	Elami	R	Csolfaut	S	Gsolreut	S
4	Elami	R	Alamire	S	-	
5	Ffaut	S	Csolfaut	S	-	
6	Ffaut	S	Alamire	R	Csolfaut	S
7	Gsolreut	S	Dlasolre	S	-	
8	Gsolreut	S	Csolfaut	S	-	

Statements made by Sancta Maria earlier in the treatise shed further light on the differentiation between remisso and sostenido cadences. In chapter ten, he remarks that a "... sharp cadence can be formed on all the white keys except the two white keys of B and E ... Similarly, of all the black keys, on only the flats can a sharp cadence be made."[23]

The addition of the subsemitone was not as simple a matter as the theorists quoted above seem to imply. Certain melodic and vertical factors clouded the issue

and demanded a degree of planning on the part of the performer. Aaron, in his Aggiunta, discussed a situation in which a melodic tritone could be removed by either of two methods (see Ex. 4) --the addition of a flat to the B or the addition of a sharp to the F. But since in this example a cadence is formed on the final G, he recommends that a sharp be added to the penultimate note:

> "The rules of counterpoint require that the last semibreve should be raised because of the sixth with the tenor [Aaron omits the tenor in his example] as in the natural raised cadences (le naturali cadenze sospesa), and sung accidentally (accidentalmente pronuntiata) [that is, with a subsemitone to G]."[24]

Ex. 4. Complications due to melodic considerations.

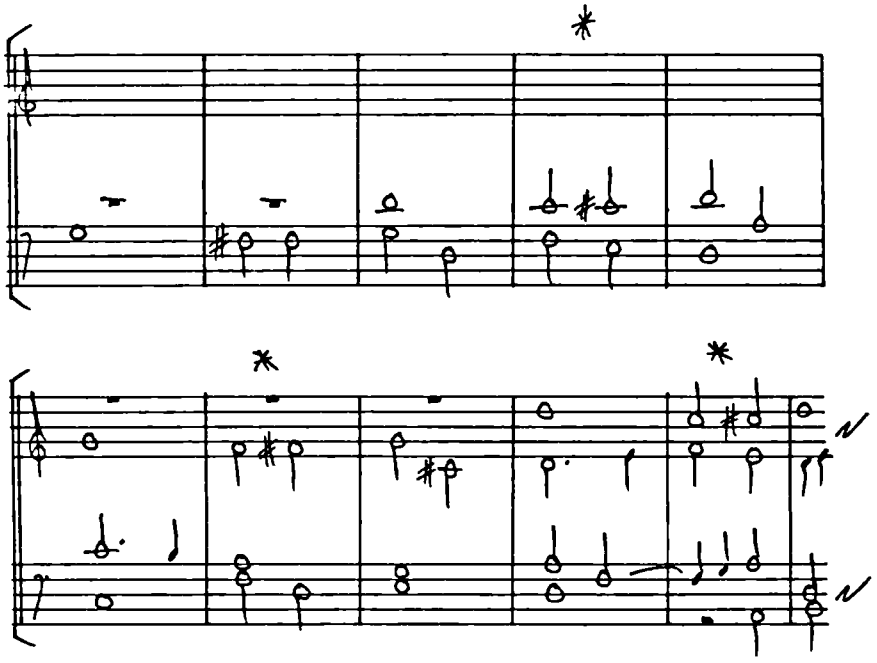
Frequently, the incorporation of the semitone at the cadence is precluded by an upper or lower voice. In cases such as those shown in Ex. 5, the performer had to decide which consideration should take precedence--the need to avoid the vertical tritone or the desire to strengthen the cadential articulation. Tinctoris, from whom the example is taken, recognised the basic incorrectness of the dissonance created by the subsemitone but conceded that its incorporation was common practice:

> "Indeed, perfect concords which are made imperfect ... by alteration, must be avoided, although I am aware that almost all composers use these ... immediately preceding a perfection in composition of three or more voices ..."[25]

Ex. 5. Subsemitone at cadences precluding its use.

Bermudo, however, employed this vertical/horizontal quandary to introduce chromatic progressions at cadence points.[26] He acknowledged that while octaves

Ex. 6. Chromatic progressions at cadences.



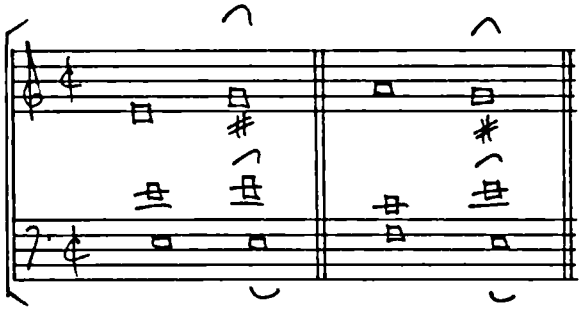
should be approached by major sixths, some impediment, namely vertical dissonance, may prevent the inclusion of the subsemitone. It is this desire to avoid dissonance, coupled with the need for a subsemitone at the cadence, which produced the chromatic lines in Ex. 6 (see those sections marked with an asterisk). In each case, the subsemitone would normally have been incorporated on the first note of the measure except that if it had been employed, either a tritone or an augmented octave would have been incurred. Therefore, the subsemitone could only be applied to the second note. Conversely, Francisco Tovar prohibited this type of contrapuntal writing because although one needs the subsemitone for the cadence, chromatic progression is forbidden.[27] Yet Hermann Finck discussed a method for solmizing these progressions, thereby implying that chromatic passages were sung as well as played:

> "If you now take C sharp, ... which is the pitch midway between C and D, then you will have mi to fa on C to C sharp, and again mi to fa on C sharp to D ..."[28]

The singer's employment of chromatic passages is confirmed by Bermudo who states that the progression C-C♯-D is even sung by some.[29]

A few authors refer to a practice which, at least according to their statements, appears to have been universal.[30] Three theorists, Aaron, Bermudo and Sancta Maria, advocate raising the third when it occurs above a cadence-note (see Ex. 7).

Ex.7. The raised third at cadences.



Aaron maintains that this practice was so common that the necessary sign did not need to be notated:

> "Although this sign [the sharp for raised thirds] is little used by learned and experienced singers but given perhaps only for the inexperienced, unintelligent singer, a proper performance would not be given to this position without it."[31]

He incorporated the raised third shown in Ex. 7 because the minor tenth above the bass sounds unpleasant. The addition of the sharp, then, helped to make a smoother sound.[32]

Bermudo, citing Ornithoparchus as his authority, concurred:

> "Then, let us say [together] with Andreas [Ornithoparchus] that, since we can begin on an imperfect consonance, we can [also] close on one. Principally, [this occurs where the imperfect consonance] is a major third which has [such] a great perfection for use [in cadences], that there is hardly a cadence for four voices [in] which one [voice] does not rest on a major tenth."[33]

Sancta Maria echoed these statements through his contention that tenths and seventeenths above the cadence-notes D, E and A must finish on a black sharp key.[34]

In addition to the practices discussed above, the unnotated subsemitone was also commonly supplied in noncadential passages. Gaffurius, in a chapter entitled 'Musica ficta in counterpoint,' mentions one such case:

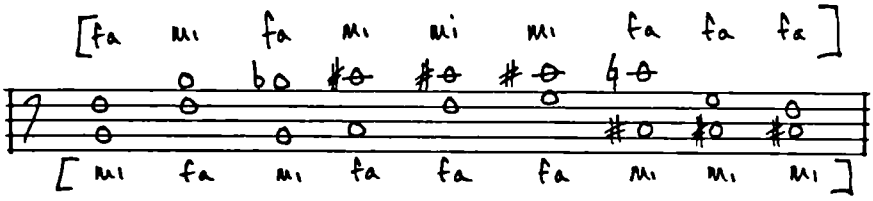
> "Very often many sing sol as a semitone below la, especially in the progression la sol la, beginning and ending on Alamire, ... The same happens with sol and fa in the progression sol fa sol, beginning and ending on Gsolreut, which Ambrosians are frequently accustomed to sing."[35]

His remarks are foreshadowed in the anonymous treatise Ars Discantus attributed to Jehan de Murs (c. 1300-c. 1350)[36] and underline the freedom with which Renaissance musicians interpreted the notated page.

Treatment of Vertical Dissonance

The most common dictum associated with vertical dissonance concerns the prohibition of sounding mi against fa. This precept is usually stated as a warning to singers who might mistakenly solmize a mi in one part and a fa in another, thus producing one of the forbidden intervals (see Ex. 8).

Ex. 8. Forbidden intervals, Zarlino IH III, 24.



Numerous theorists, however, after explicitly prohibiting the use of mi contra fa, immediately qualify their position by discussing the frequent exceptions to the rule. Zarlino's comments typify the situation:

> "...the syllable mi may never be used against fa in perfect consonances, as we shall see later. However at times the semidiapente is used in counterpoint instead of the diapente, and the tritone in place of the diatesseron, both with good effect."[37]

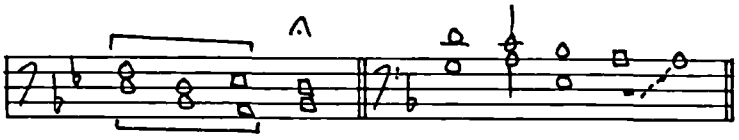
In a later chapter of the same treatise, Zarlino provides examples of permissible vertical dissonance, (see Ex. 9) but he advises that the semidiapente and tritone be preceded by a perfect or imperfect consonance.[38]

Ex. 9. Permissible vertical dissonance.

More than eighty years earlier, Tinctoris had discussed the mi contra fa precept in similar terms:

"Indeed, we ought to avoid the false unison and the false diapente, and false octave and any other false concord caused either by the lack or overabundance of a major semitone, for this reason it is taught by masters to their students from the beginning that they do not introduce mi against fa in perfect concords. Nevertheless, I have discovered the opposite most frequently among many, many composers, even the most famous, as with Faugues ..., with Busnois ..., and with Caron ..."[39] (see Ex. 10).

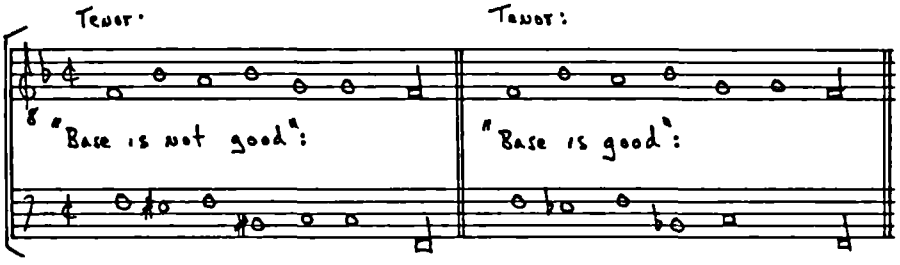
Ex. 10. Permissible vertical dissonance.[40]



Ornithoparchus, on the other hand, stated the precept somewhat differently:

"In perfect Concordances never set a sharpe Voyce against a flat, nor contrarily, but set a Sharpe against a Sharpe; a Flat against a Flat, or at least against a naturall."[41] [Ornithoparchus employs the terms 'vox mollis,' 'dura' and 'naturalem'.] (See Ex. 11).

Ex. 11. The proper setting of voices.[42]

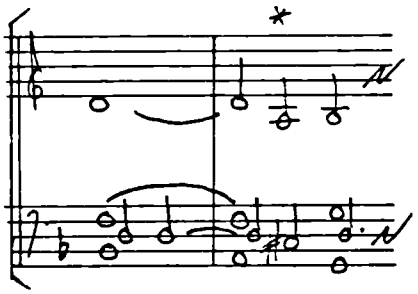


However, at least one theorist explained why this degree of latitude was required in the correction of vertical dissonance:

> "And [as a result of] the way singers have their ears trained--to hear what is in an individual line--it [the diminished fourth] is employed in composition,..."[43]

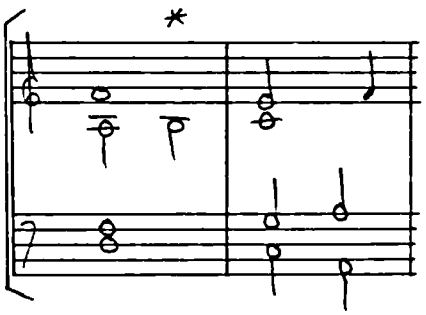
Bermudo then goes on to discuss the acceptable uses of the diminished fourth and other vertical dissonances. He first mentions cases in which the diminished fourth is prepared and enters on a rhythmically unstressed part of the measure (see Ex. 12).[44] Somewhat later he

Ex. 12. Prepared diminished fourth.



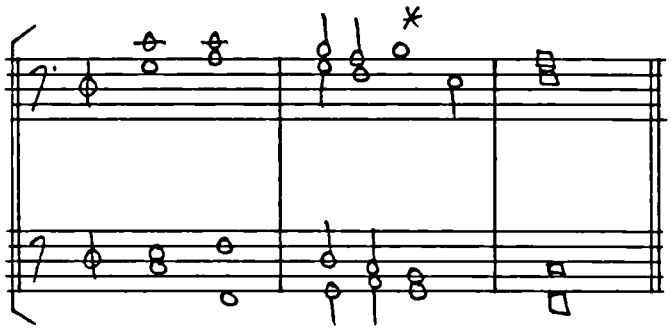
notes that the tritone may be used in passing especially if it proceeds to an octave (see Ex. 13). Following this,

Ex. 13. Passing tritone.



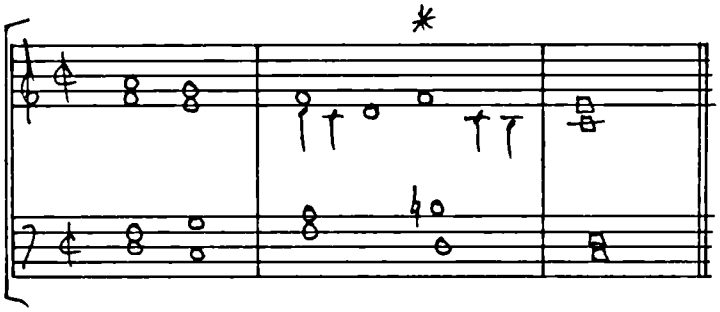
Bermudo treats the employment of mi against fa in fifths. He states that this forbidden interval, the diminished fifth, is commonly used in cadences involving a suspension figure (see Ex. 14) and in 'robbed' cadences

Ex. 14. Cadential mi contra fa.



(clausula hurtada) (see Ex. 15). Bermudo defines the

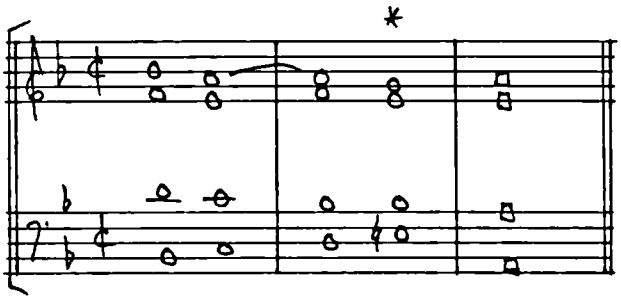
Ex. 15. The 'robbed' cadence.



'robbed' cadence as a cadence in which one of the voices

containing the mi against the fa does not proceed to the expected cadence tone but another voice does so instead.[45] The diminished fifth may also be employed in cadences if it is prepared in the following way:

Ex. 16. Cadential diminished fifth.



In this example, the mi contra fa has been prepared by two things -- by the octave between the altus and the bassus which removes any possible 'rudeness' and by the tenor remaining on B^b. But in order to further strengthen the case for using this dissonance, Bermudo cites Cristobal de Morales as one of its practitioners and maintains that mi contra fa is frequently encountered in the works of Gombert.

Other theorists comment upon additional situations in which vertical dissonance may be employed. Aaron permits passing dissonance in rapid passages:

> "Note that in songs with diminution that the first and last notes in a diminished passage should be consonant, and the middle notes may be diverse, with some dissonance, as the passage may naturally tolerate. Because of the speed that is found in the voices with diminutions, any dissonance they contain will not be unpleasant to the ear of the singer."[46]

and Coclico contends that fa may be sung against mi if the note is part of a scalewise passage.[47]

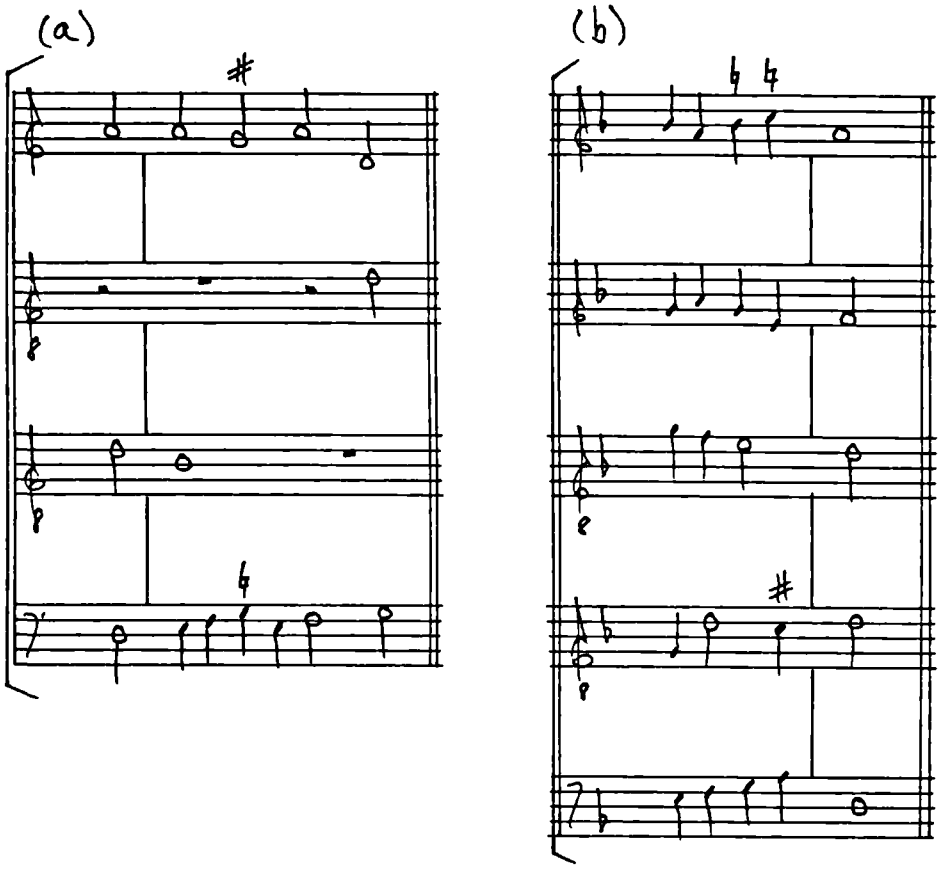
One vertical dissonance which Bermudo does not permit, however, is mi contra fa in an octave:

> "But fa against mi in an octave has no preparation -- because we have to preserve the true composition of the unisonal sound. From which I infer that all the consonances can be modified [by fa against mi], more or less without displeasure to the good ear, but the octave and its analogues [unison, fifteenth, etc.] will not suffer this."[48]

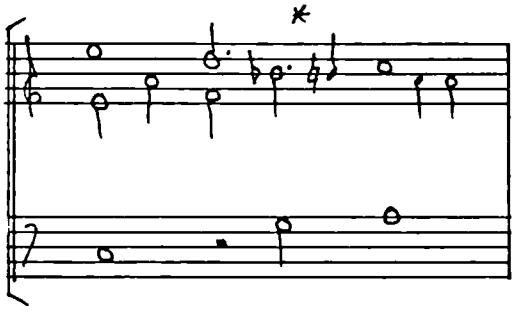
But not all theorists agreed. Francisco Correa de Arauxo, citing the composers Josquin and Gombert and the theorist Francisco de Montanos as his authorities, discussed a dissonance in which an intense note (punto intenso) sounded against a relaxed note (punto remisso).[49] The resultant dissonance, either a diminished or an augmented octave, was observed by Correa in the music of many composers. In a number of these works, however, the necessary chromatic sign was not notated even though "... reason called for it and [the] force [of the music] required that it be there."[50] Correa discussed two such examples, Gombert's O gloriosa Dei genitrix and Ay me qui vouldra (see Ex. 17), and provided, in tablature, the music for another, a Pleni sunt by Josquin (see Ex. 18). In the examples, the superscript chromatic signs for O gloriosa Dei genitrix are derived from Correa's verbal

description of the *octava mayor* which occurs at this point, and in *Ay me qui vouldra*, the chromatic signs come from Cabezon's intabulation of the work[51] to which Correa refers. Correa also directs the reader's

Ex.17. (a) *O gloriosa Dei genitrix*, mm. 17-18 (b) *Ay me qui vouldra*, mm. 42-43.

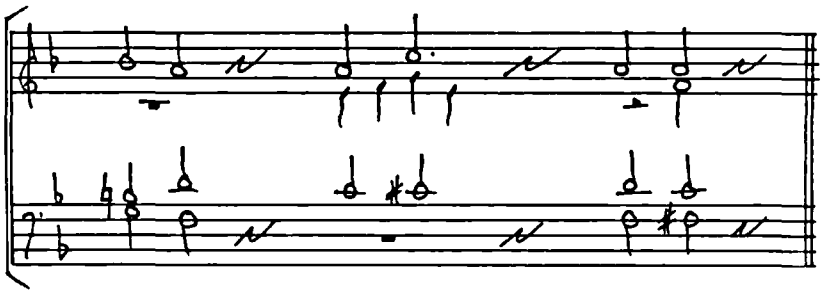


Ex. 18. *Pleni sunt*.



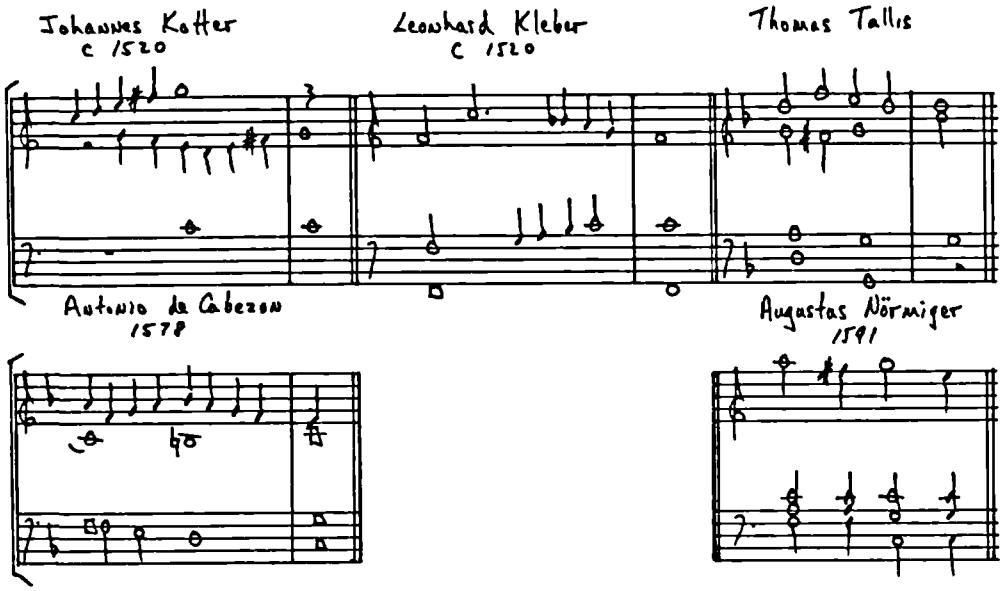
attention to a 'demostracion' in Francesco de Montanos' treatise, Arte de Musica (Valladolid, 1592), that contains several dissonant octaves (see Ex. 19).

Ex. 19. Punto intenso contra remisso in Montanos' treatise.[52]



Although Correa's treatise is quite late to be included in a discussion of Renaissance matters (it was printed in 1626), his impressive documentation of the practice establishes beyond doubt that it was indeed known in the sixteenth century. Further evidence on the Renaissance use of dissonant octaves has been discovered by Willi Apel.[53] Apel's careful perusal of sixteenth-century keyboard works has revealed a number of instances of the practice, and five of these are reproduced in Ex. 20.

Ex. 20. Dissonant octaves in keyboard works.[54]



The final category of vertical dissonance that remains to be discussed is the nonharmonic relation. Zarlino defines these relations and prohibits them in two-part compositions:

> "When we say that the parts of a composition do not have an harmonic relation between their voices, we mean that the parts are separated by an augmented or diminished diapason, or by a semidiapente or tritone or similar interval ... So these intervals, which are not admitted in melodic motion, must also be avoided in the relations between parts [that is, in two-part pieces]."[55]

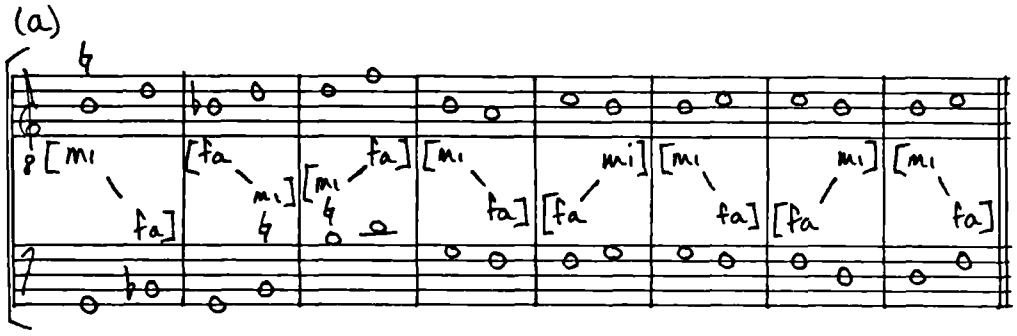
But,

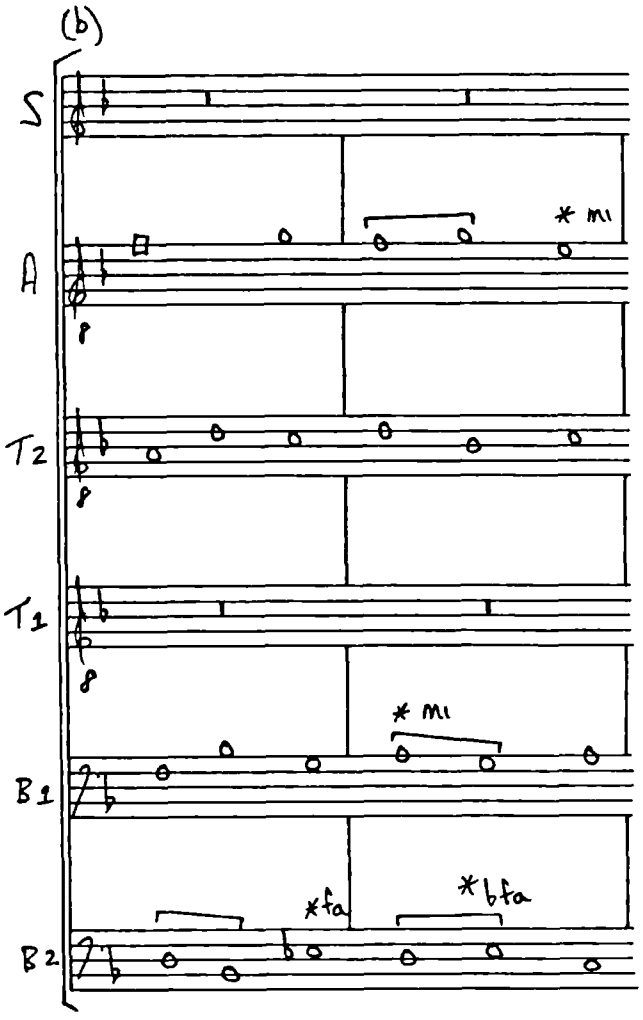
> "In compositions for many voices, on the other hand, I believe that it is not so vital to avoid nonharmonic relations... there are intervals and relations that give little pleasure in themselves but have wonderful effect when combined with others."[56]

The dissonance which emerges from these relations almost invariably results from voice parts following their own inner logic in which one voice, sounding mi, clashes with another, sounding fa. Zarlino provides an example of these false relations, and these relations also occur in the works of Josquin (see Ex. 21).

Ex. 21. (a) Nonharmonic relations, Zarlino

(b) Praeter rerum seriem, secunda pars, mm. 66-67.[57]





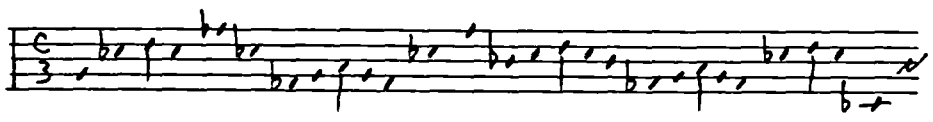
Treatment of Melodic Dissonance

The theorists' approach to discussing melodic dissonance follows a similar pattern to their treatment of vertical dissonance, that is, they emphatically prohibit the use of certain intervals and yet demonstrate how these forbidden intervals may be employed in composition. The following statement by Martin Agricola is typical:

> "Although these last three intervals [the tritone, semidiapente and semidiapason] are forbidden and have a bad sound, we have composed an example of each nevertheless, because they are occasionally found in figural [music] ..."[58]

Ornithoparchus, in his "Rules for Ficta Musicke,"[59] provides an example of how one must eschew the above-mentioned intervals (see Ex. 22) but, earlier in the treatise,[60] had illustrated the use of the tritone, describing it as a 'learned licence' (see Ex. 23).

Ex. 22. "An Exercise of Ficta Musicke".



Ex. 23. Use of the tritone.

With regard to these melodic dissonances, Zarlino declared that they should be eliminated even if the composer had not so indicated:

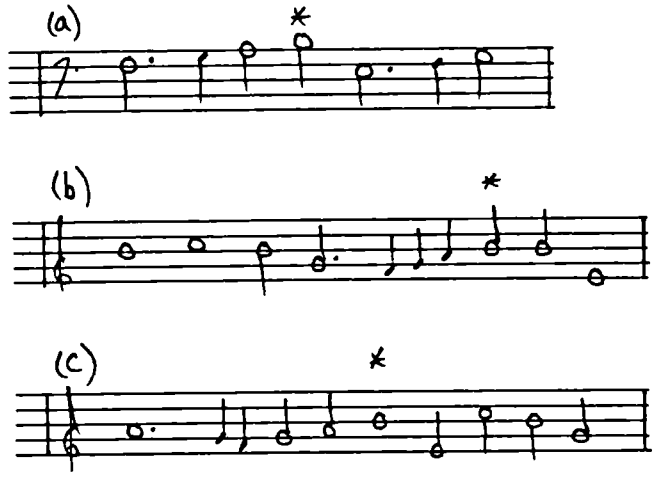
> "This they [the singers] do so that the voice lines may progress smoothly. It would indeed be superfluous for the composer to mark these accidentals [chromatic signs] for nonharmonic intervals ... should never be sung."[61]

Pietro Aaron foreshadowed Zarlino's contention and stated:

> "Even if b molle is not shown, with every learned and unlearned musician, as an ordinary and special rule constituted by musicians, it is understood that this harshness is never to be tolerated."[62]

Nevertheless, Aaron recognised that this rule would have to be broken in certain situations and he presented three such occasions (see Ex. 24).[63] In each

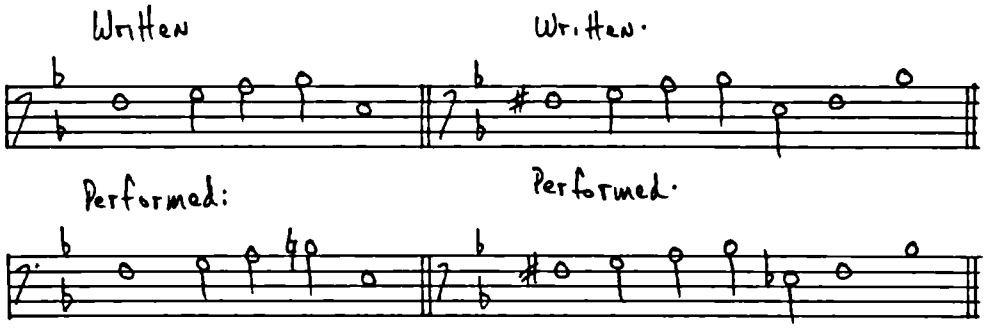
Ex.24. Unavoidable tritones.



case, the singer is forced to choose the lesser of two evils--to sing either the tritone or the semidiapente. He concludes that the smaller error is to sing the semidiapente and, therefore, the Bs (marked with asterisks) should not be sung as fas, that is, as B^{b}s. And even Zarlino had to admit that the composer could occasionally use the semidiapente melodically when it was suitable to the meaning of the text.[64]

Almost one hundred years later, Praetorius, reproducing the same example as that given by Aaron (see Ex. 24a), furnished two interpretations of this ambiguous passage (see Ex. 25).[65] If the melodic line rose from F to B^{b} and then descended to E, the B^{b} would have to be altered to B♮ (as Aaron had suggested), but, if F♯ was marked, the melodic tritone would no longer exist and the ultimate note in the leap from B^{b} to E would have to be lowered to E^{b}.

Ex. 25. Ambiguous melodic lines.

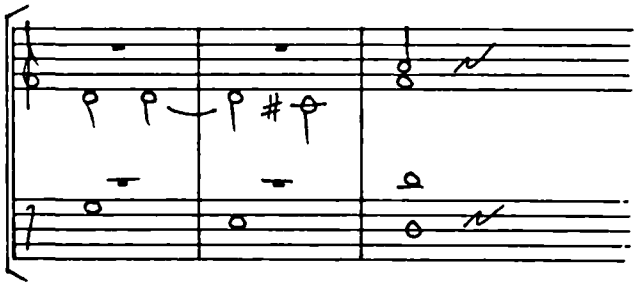


Other theorists discussed additional exceptions to the prohibition against melodic dissonance. Tinctoris, for example, remarked that in order to avoid mi contra fa vertically, the composer sometimes had to use a tritone melodically (see Ex. 26).[66]

Ex. 26. Melodic dissonance preferable to vertical dissonance.

Moreover, Bermudo permitted the leap of a diminished fourth when it was prepared by a simulated cadence (see Ex. 27).[67] The cadence in Ex. 27 was said to be simulated because the cadence-note D, to which the altus would normally have progressed, was provided by the tenor, thereby allowing the altus to leap to F. Sancta Maria,

Ex. 27. Diminished fourth in a simulated cadence.



on the other hand, prohibited the use of augmented and diminished fourths and fifths in leaps; but he did permit the augmented fifth in ascending stepwise progressions and the diminished fifth in either ascending or descending scalar motion (see Ex. 28).[68] Similarly, Glarean

Ex. 28. Permissible augmented and diminished fifths.

disapproved of the major sixth as a leap because it was exceedingly difficult to sing.[69]

One particular convention, known throughout the sixteenth century, that dealt with a specific category of melodic dissonance, the tritone, was eventually codified by Praetorius in the early seventeenth century into the familiar phrase:

> "...unicâ notulâ ascendente super la,
> semper canendum esse fa, ..."[70]

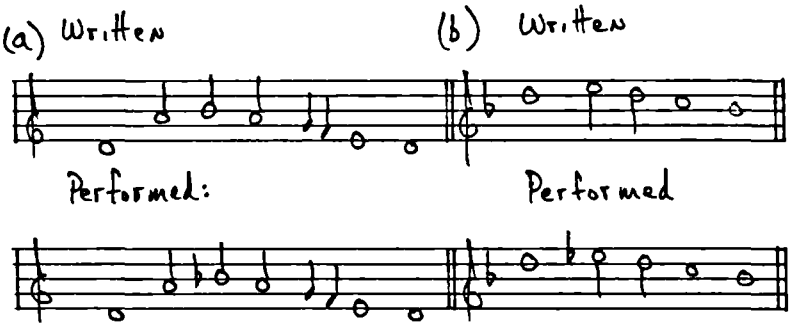
But this convention, stated in a different form, had already been established by the time of Ornithoparchus (i.e., by 1517):

> "Whensoever a Song ascends from Dsolre to Alamire by a fift, mediately or immediately, and further onely to a second [ascends], you must sing fa in bfa ♭ mi in every Tone [mode], till the song do againe touch Dsolre, whether it be marked or no."[71]

Although Ornithoparchus did not supply a music example to demonstrate this principle at work, his description fits the example in Praetorius' treatise perfectly (see Ex. 29a). The principle also applies to compositions in which the mode is in cantus mollis position:

> "...whenever a song ascends no higher than b fa ♭mi or E la mi in the soft b hexachord, it should then always be sung as fa in these cases.[72] (See Ex. 29b).

Ex.29. The fa supra la convention.[73]



Both Martin Agricola and Maximilian Guilliaud imply that this convention should be adopted as the normal practice unless the signs ♭ or ♯ are written beside the note in question.[74]

Characteristically, however, exceptions to the precept are mentioned:

"But this Rule failes, when a song doth not straightwayes fall to F faut, ..."[75]

By this, the author refers to a situation in which the two notes of the tritone, in this case B and F, become so widely separated that the dissonance would not be heard anyway. In addition, Aaron contends that the melodic progression from D through A to B (the progression discussed by Ornithoparchus above) is frequently sung with B mi, especially when the line proceeds past B to C.[76]

* * * * * * * * *

Several factors emerge from the preceding discussion which should help to further our understanding of how the addition of unnotated chromatic signs affected the level of dissonance in sixteenth-century vocal music. The incorporation of these unspecified alterations commonly arose from the desire to avoid certain types of vertical and melodic dissonance, but the theorists by no means advocated the avoidance of dissonance in all cases. In fact, some of them devoted more space to discussing the exceptions to the precepts prohibiting dissonant intervals than to presenting the precepts themselves. Nonharmonic relations were indeed accepted by theorists, who also permitted mi contra fa in numerous situations involving fourths, fifths and octaves. Even

the addition of the cadential subsemitone was not necessarily precluded by the vertical constraint of the other parts. In the past, scholars have not fully recognised the importance of these factors. Nevertheless, as the intabulations of Josquin's motets will demonstrate, the exceptions played as important a role in determining normal Renaissance practices as did the precepts themselves.

CHAPTER V

THE INTABULATORS' INTERPRETATIONS OF PITCH CONTENT IN JOSQUIN'S MOTETS

The purpose of this chapter is to document the various manners in which the pitch content of Josquin's motets was interpreted in the sixteenth century. Evidence that divergent approaches were taken by Renaissance musicians was provided by the Flemish singer Ghiselin Danckerts (c. 1510 - after 1565) who, in the by now famous dispute between two singers in the Roman church of S. Lorenzo in Damaso, demonstrated that more than one solution to passages containing ambiguous pitch content was feasible.[1] Since, as this dispute aptly reveals, even the singers in one chapel could not agree on which course to follow, the contrasting interpretations encountered in the intabulations of Josquin's motets should be no surprise. The flexibility of the theoretical framework within which Renaissance musicians operated made this diversity inevitable.

But were Renaissance instrumentalists actually aware of the theoretical precepts of their own time, and if they were, did they understand how to apply these precepts in the vocal works they intabulated? That many instrumentalists understood modal theory and

solmization is hardly to be doubted. Biographical information confirms that a number of lutenists were regularly employed as singers or played other instruments in addition to the lute. The renowned lutenist Francesco da Milano was also a viol-player and may have been the organist at the Duomo of Milan around 1530.[2] Jean Matelart, lutenist, was appointed c. 1565 as the maestro di capella at S. Lorenzo in Damaso;[3] and during the 1540s the vihuelist Luis de Narvaez taught singing to the children in the chapel of Phillip II of Spain.[4] Similarly, a number of of the lutenists at the court of Mantua in the late fifteenth and early sixteenth centuries were also employed as singers.[5]

In addition, numerous sixteenth-century instruction-books for student instrumentalists teach and stress the importance of acquiring a knowledge of modal theory, solmization and mensural notation. The instructions on intabulating by Gerle, Bermudo, Panhormitano, Galilei and Le Roy listed in Chapter II of this dissertation are cases in point, and many other books disclose the fact that a knowledge of solmization was as important to the instrumentalist as it was to the singer. Sancta Maria maintained that keyboard players should understand the solfa (solmization) for each voice of a fantasia, singing it alone.[6] And Diego Pisador expected the vihuelist to acquire this skill as well. In his Libro de Musica (Salamanca, 1552), Pisador

intabulated one of the voice parts in each of twelve fantasias in red ciphers so that the vihuelist, with the aid of solmization syllables placed beneath each coloured cipher, could sing the part.[7] Moreover, certain books, for example those by Milan, Fuenllana, Sancta Maria, Virdung and Judenkunig, present the tuning of the lute through solmization syllables.[8] In fact, this method of denoting the lute's tuning remained common until at least the 1620s.[9] Still other books, such as those by Milan, Fuenllana and Adrianssen, discuss the modes in relation to the lute.[10] Both Milan and Fuenllana, by including the modal designation for various pieces in their collections, enable the vihuelist to observe the 'natural and accidental' cadences that may be formed in each mode.[11]

In light of the evidence cited above, it is impossible to maintain that no instrumentalist was aware of solmization and other aspects of contemporary theoretical teaching.[12] Adrian Le Roy, editor of both vocal sources and their intabulations, was undoubtedly capable of applying theoretical precepts during the intabulation process.[13] And certainly Francisco Correa de Arauxo admired Antonio de Cabezon's ability to interpret those passages in Gombert's works in which the punto intenso contra remisso occurred.[14] Furthermore, it has already been noted that instrumentalists adopted the singer's linear approach when intabulating vocal music.[15] Thus, the evidence tends to favour the conclusion that

instrumentalists and singers did indeed work within one and the same theoretical framework. After all, lutenists frequently accompanied singers and surely both parties must have reached agreement on the interpretation of the pitch content.[16]

The ensuing study, then, will discuss pitch content in the printed intabulations of Josquin's motets. Since there is no way of determining which reading(s), vocal or instrumental, Josquin might have endorsed, no study can document Josquin's own practices. What will emerge, however, is an understanding of how performers during the fifty or so years after his death interpreted the vocal sources of his motets.

Treatment of Cadences

The subsemitone at Primary, Secondary and Transitory Cadences.

The intabulations provide ample opportunity to view the use of the subsemitone at primary, secondary and transitory cadences in five modal groups:

Dorian	Memor esto
Dorian <u>cantus mollis</u>	Ave Maria...benedicta tu Ecce, tu pulchra es In exitu Israel de Aegypto Pater noster Praeter rerum Qui habitat

	Salve regina Tribulatio et angustia
Phrygian	Miserere mei
Lydian <u>cantus mollis</u>	Absalon, fili mi In principio erat verbum Inviolata Stabat Mater
Mixolydian	Benedicta es

For each of these modal groups, the occurrence of <u>sostenido</u>, <u>remisso</u> and Phrygian cadences has been summarised in the following chart:

Ex.1. <u>Sostenido, remisso</u> and Phrygian cadences in the motet intabulations

[S = sostenido, R = remisso, P = Phrygian]

Dorian

Primary	D 60%S 40%R	A 50%S 35%R 15%P
Secondary	F 100%S	E 100%P
Transitory	C 100%S	G 100%R

Dorian <u>cantus mollis</u>

Primary	G 89%S 11%R	D 48%S 26%R 26%P
Secondary	B^b 100%S	A 100%P
Transitory	F 100%S	C 86%S 14%R

Phrygian

Primary	E 100%P	A 63%S 37%R
Secondary	C 100%S	G 100%R
Transitory	D 80%S 20%R	

Lydian cantus mollis

Primary	F 100%S	C 100%S
Secondary	A 8%S 92%P	
Transitory	G 80%S 20%R	D 90%S 10%R

Mixolydian

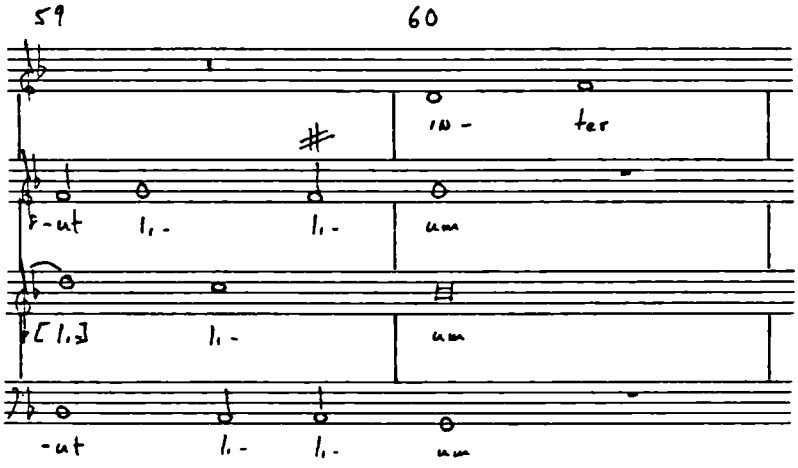
Primary	G 100%S	D 100%S
Secondary	C 100%S	
Transitory	-	-

Clearly, many theorists overstate their case when they maintain that all perfect intervals must be approached by the closest imperfect interval. Perhaps a more realistic codification of the practices current in the mid-sixteenth century occurs in Sancta Maria's classification of cadences as either sostenido or remisso. But even here the instrumentalists diverge quite markedly from Sancta Maria's lucid exposition of the cadential subsemitone.[17] To be fair, the theoretical discussions of these matters often represent simplified versions of the situations encountered by performing musicians. The theorists simply could not discuss every possible ramification of their precepts. Moreover, the exceptions to the rules that they do mention, illuminating as they are, do not tell us how common these exceptional cases actually were. The intabulations, then, when coupled with the theoretical

guidelines, provide the truest reflection of contemporary practices that we can hope to obtain. A closer examination of the cadential practices encountered in the intabulations will therefore elucidate Renaissance procedures further.

Under certain conditions, the intabulators incorporated the subsemitone almost invariably. Cadences involving suspension figures (see Ex. 2) were normally rendered sostenido regardless of whether the cadence was primary, secondary or transitory in function--the only exceptions being Phrygian cadences and those interpreted as Phrygian by the intabulators.[18] This affirms

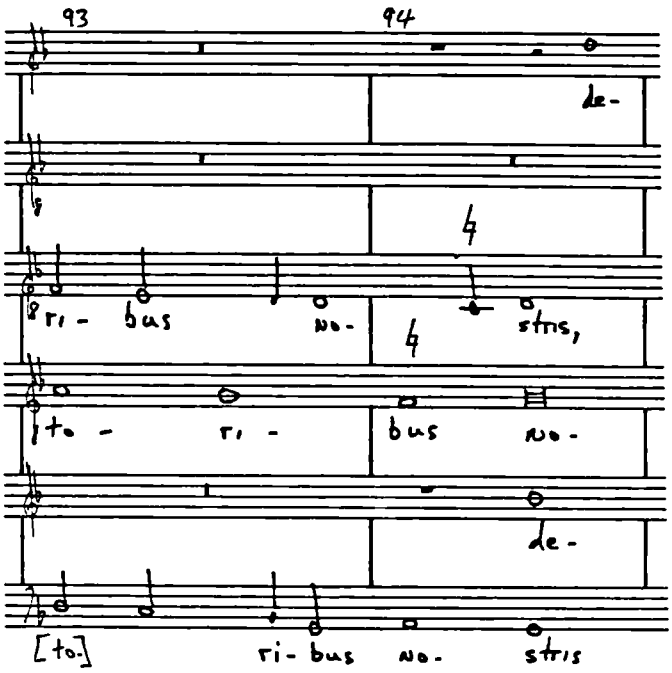
Ex.2. Ecce, tu pulchra es, 59-60.



Cochlaeus' and Vanneus' contention that clausulae solmized re ut re and sol fa sol regularly included the subsemitone.[19] However, in eight of the more than two hundred cadences containing suspension figures, some of the intabulators omitted the subsemitone when it was precluded by another voice (see Ex. 3). A small minority of the instrumentalists, notably Simon Gintzler,

preferred to avoid incurring vertical dissonance in these cases.

Ex. 3. Pater noster, I 94.

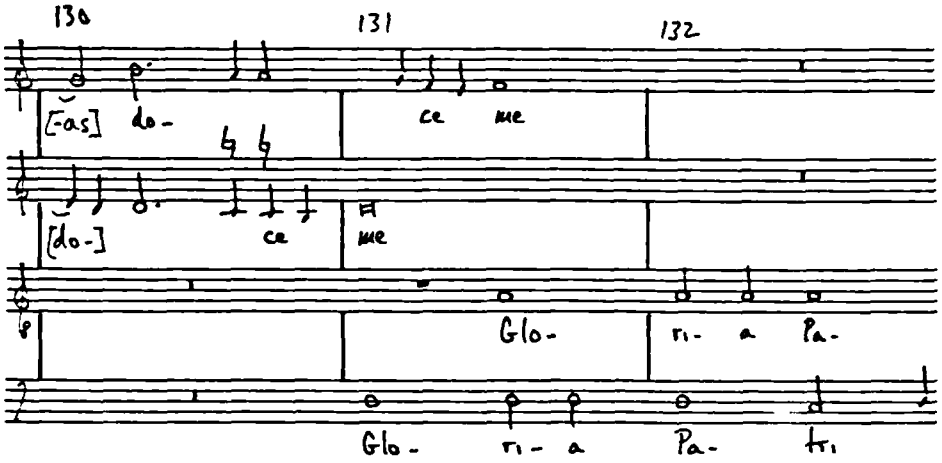


A number of the intabulators omit the subsemitone at other cadence points as well. Surprisingly, Hans Newsidler occasionally interprets primary cadences, which one would normally expect to be approached by the subsemitone, as remisso (see Ex. 4).

Ex. 4. Memor esto, II 40-42, 143-45.

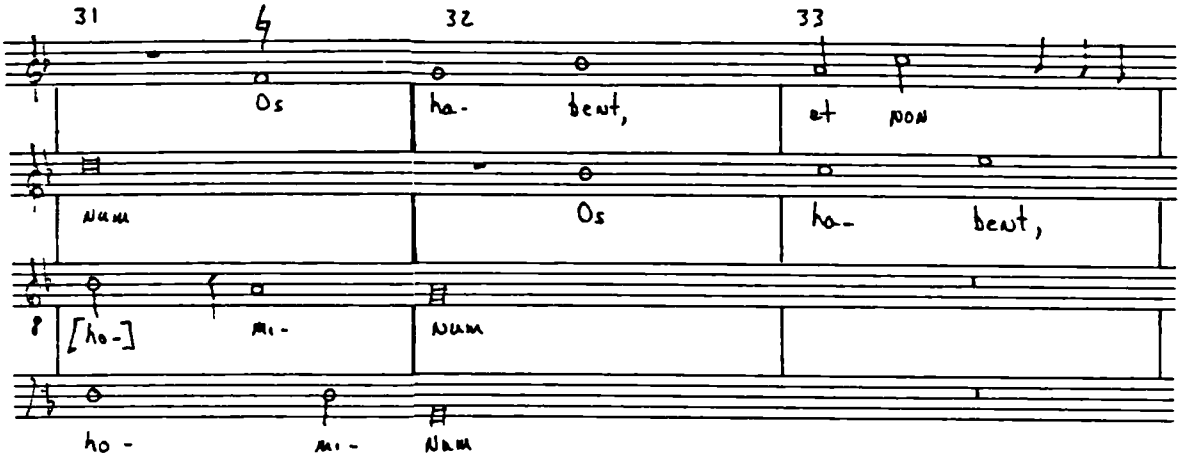
That certain primary cadences should be remisso is understandable, however, in two-part clausulae where, even though one of the voices contains stock cadential ornamentation, the other voice does not proceed to the cadence-note (see Ex. 5). Similarly, the remisso

Ex. 5. Memor esto, II 130-32.



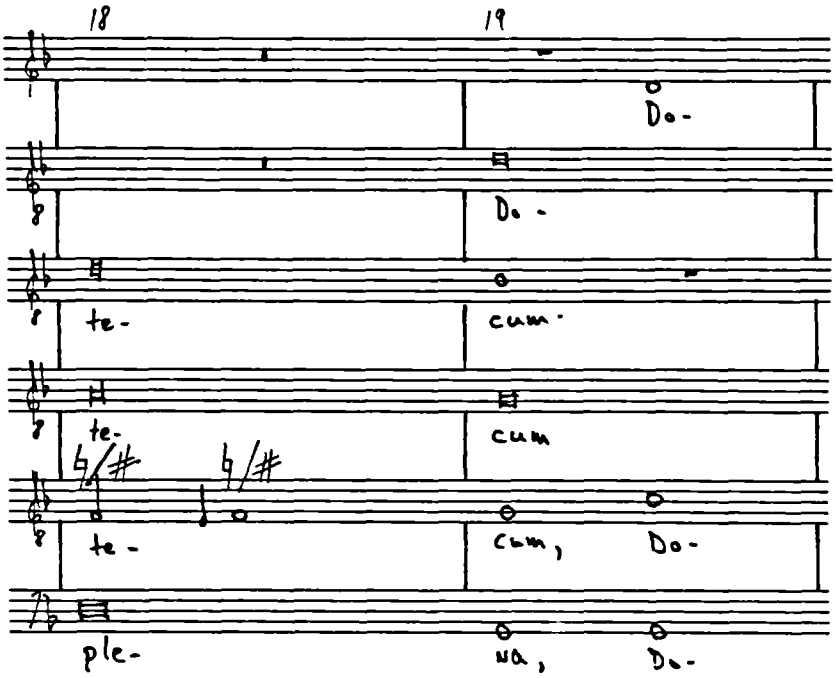
interpretation of clausulae in which the subsemitone would have to be supplied by a voice not involved in the cadence is also readily comprehensible (see Ex.6).

Ex. 6. In exitu, II 31-33.



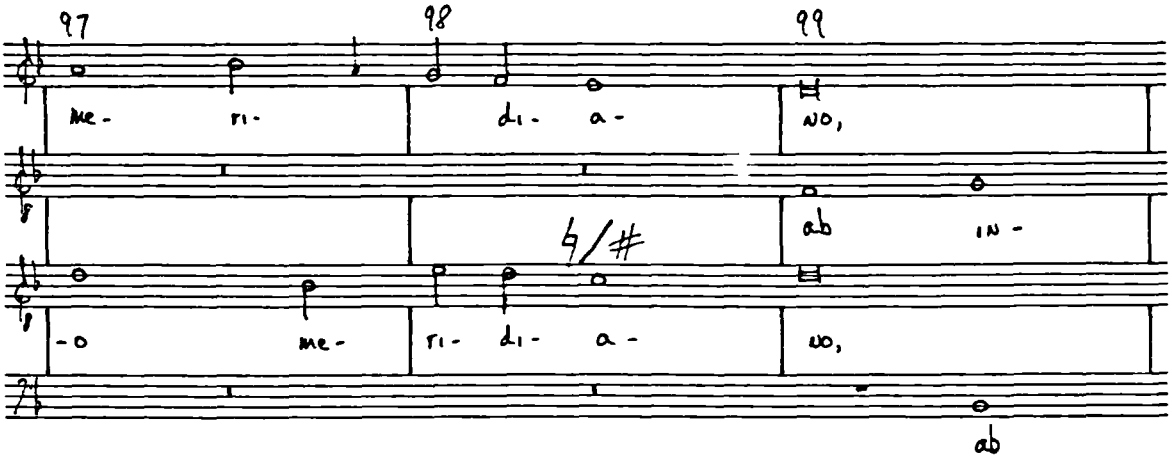
But the reasons for omitting the subsemitone at primary cadences where no complications arise remain elusive. Nevertheless, whatever reasons a performer had for interpreting these primary cadences as remisso, his colleagues did not always agree. In Pater noster (II 19), for example, Francesco da Milano, Enriquez de Valderravano and Pierre de Teghi omit the subsemitone at this point whereas Simon Gintzler and Sebastian Ochsenkun prefer to specify a sostenido cadence (see Ex. 7). Analogously, Valentin Bakfark included

Ex. 7. Pater noster, II 18-19.



the subsemitone in the two-part clausula at mm. 98-99 of Qui habitat while his German counterparts, Hans Gerle and Sebastian Ochsenkun, chose to make this cadence remisso (see Ex. 8).

Ex. 8. Qui habitat, I 97-99.



Preclusion of the Subsemitone.

Usually, however, the diversity discussed above

arose from cadences in which the application of the subsemitone was precluded by an upper or a lower voice. For example, in cases such as those shown below, the incorporation of the subsemitone would produce dissonance between the parts (see Ex. 9). And although the instrumentalists differ in their interpretations of these

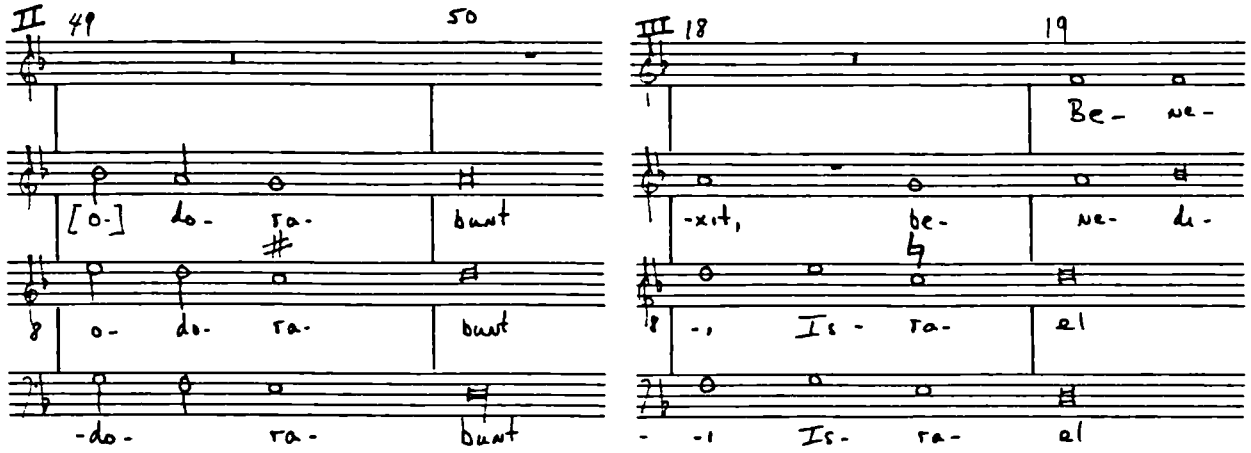
Ex. 9. (a) Salve regina, 1-3 (b) Pater noster, I 30-32.

particular passages, the intabulations are frequently consistent in their treatment of clausulae with precluded subsemitones. On numerous occasions, all of the intabulators specify the subsemitone regardless of the effect on the vertical sonority (see Ex. 10 for two such instances). But of course, even though this unanimity

Ex. 10. (a) Inviolata, I 56-58 (b) Qui habitat, I 103-05.

occurs repeatedly among the intabulations, individual instrumentalists do not always interpret this type of cadence uniformly. Sebastian Ochsenkun, for instance, incorporates the subsemitone at one primary cadence but not at another similar one (see Ex. 11).

Ex. 11. In exitu, II 49-50, III 18-19.

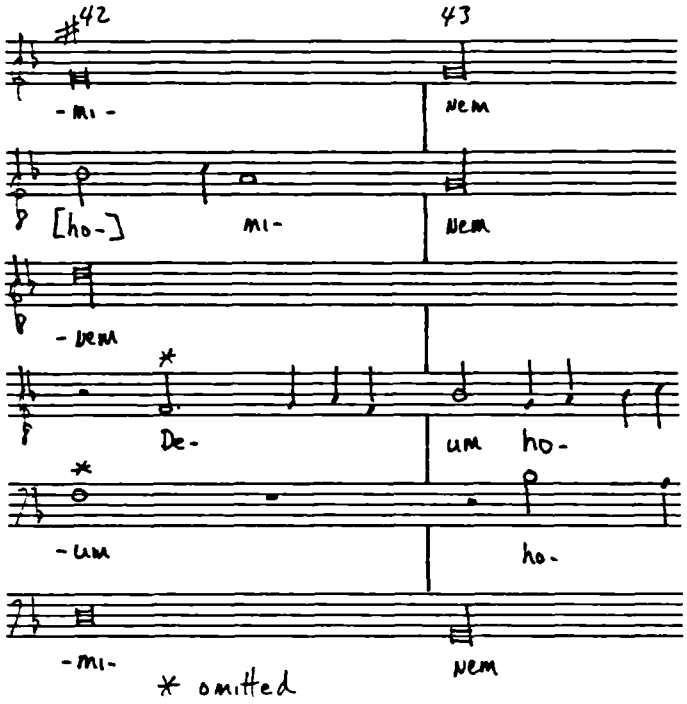


One circumstance does exist, however, in which the intabulators regularly excluded the subsemitone. Cadential part — writing containing doubled subtones prevented most of the instrumentalists from creating sostenido cadences (see Ex. 12). Nevertheless, if the

Ex. 12. Salve regina, 23-25.

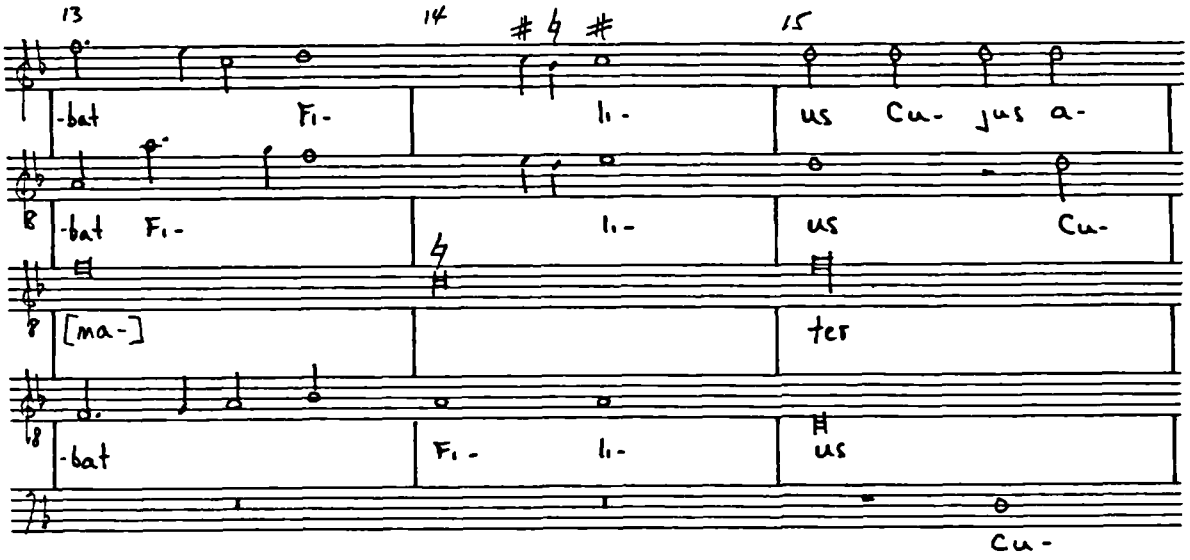
performer wished to include a subsemitone at one of these cadences, he could do one of two things--omit the restrictive voice or produce a punto intenso contra remisso. The first solution was favoured by Simon Gintzler and Albert da Rippe in Praeter rerum (see Ex. 13) and the second was adopted by Sebastian Ochsenkun in Stabat Mater and by Francesco da Milano in Pater noster (see Ex. 14).

Ex. 13. Praeter rerum, I 42-43.

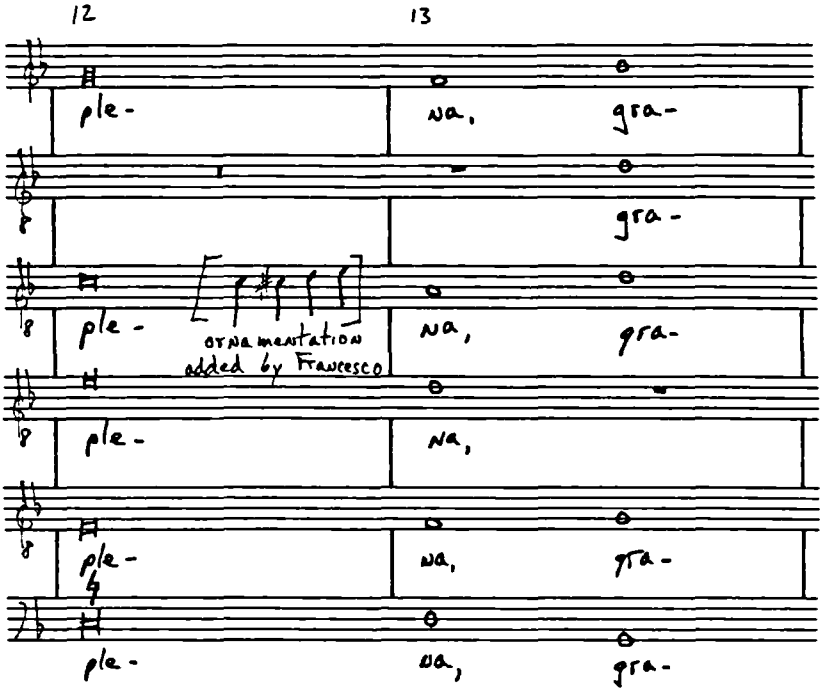


Ex. 14. (a) Stabat Mater, I 13-15 (b) Pater noster, 12-13.

(a)



(b)

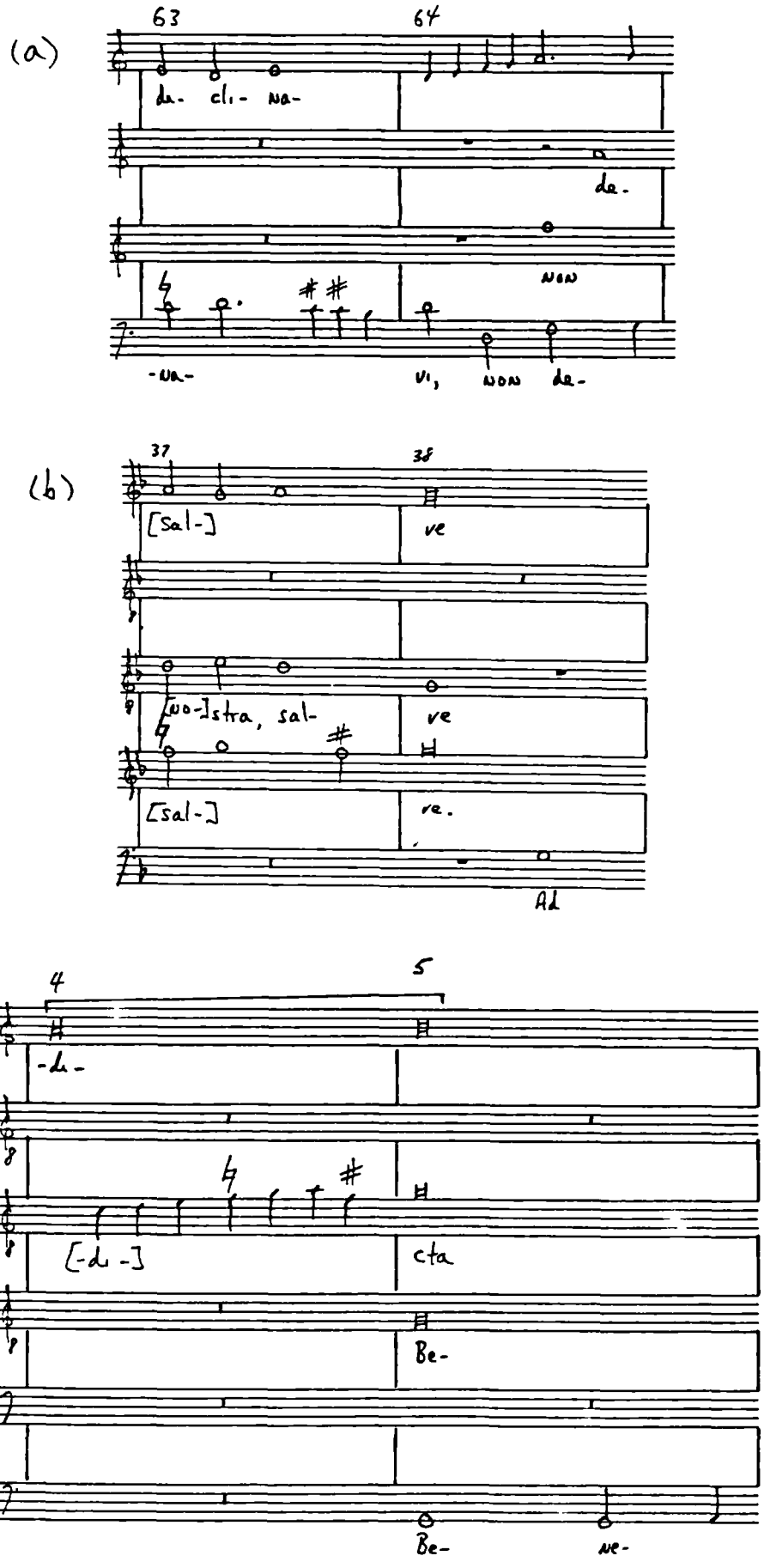


Thus, the inclusion of the subsemitone at cadences where its application was precluded appears to have been governed by the level of dissonance that particular musicians desired in their arrangements. As Tinctoris remarked, "... almost all composers use these [dissonances] ... immediately preceding a perfection in composition..."[20]

Chromaticism at Cadences

Frequently, the intabulators' interpretations of certain types of cadential part writing produced chromaticism within single voice parts. This practice is most commonly encountered in passages like the following:

Ex. 15. (a) Memor esto, I 63-64 (b) Salve regina, 37-38
(c) Benedicta es, I 4-5.[21]



In these cadence figures, the chromaticism results from the subsemitone being applied to only the penultimate note of the clausula. The instrumentalists who rendered these types of passages chromatically include Hans Newsidler, Miguel de Fuenllana, Diego Pisador and Pierre Phalèse.[22] Other musicians, especially Francesco da Milano, Sebastian Ochsenkun and Antonio de Cabezon, introduced these same chromatic lines through the ornamentation that they added at cadence points (see Ex. 16).

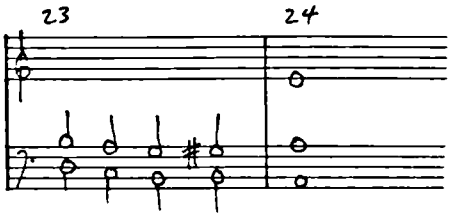
Ex. 16. (a) Pater noster, I 100-01, Ochsenkun
(b) Pater noster, I 114-15, Francesco da Milano
(c) Benedicta es, I 102-03, Antonio de Cabezon.

A striking chromatic progression occurs in Simon Gintzler's arrangement of Stabat Mater (see Ex. 17).

Ex. 17. Stabat Mater, I 65-67.

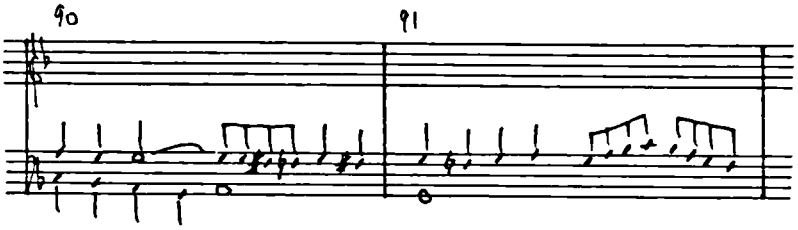
Gintzler, in following normal intabulation procedure, divides the tenor's longa into shorter note values, thereby providing the opportunity for the creation of a clausula sostenida on D. By using ornamentation as the vehicle for incorporating the subsemitone, Gintzler is able to approach the cadence — note from the closest imperfect interval. The German lutenist, Wolff Heckel, employs a similar procedure in his arrangement of Josquin's chanson Mille regretz (see Ex. 18).

Ex. 18. Mille regretz, 23-24.



Further examples of chromatic progressions at cadence points are found in the intabulations by Hans Gerle. Gerle occasionally embellishes clausulae with the following figure:

Ex. 19. Qui habitat, II 90-91.



That this chromatic line is not a misprint for 

can be established by the fact that he also uses the same chromatic figure earlier in Qui habitat (see I 78-79) and by the fact that other lutenists employed similar progressions. For example, Hans Newsidler, in his arrangement of Josquin's Mille regretz, ornamented one primary clausula with the figure:

Ex. 20. Mille regretz, 23.

Creation of *Sostenido* Cadences Through Ornamentation

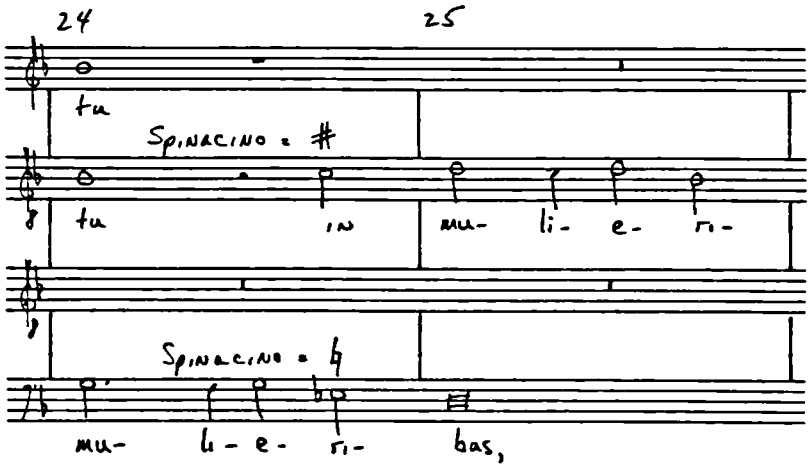
Certain intabulators even used ornamentation to introduce cadential subsemitones in places where the required notes did not exist in the vocal model. Both Sebastian Ochsenkun and Francesco da Milano exemplify this practice (see Ex. 21).

Ex. 21. (a) *Qui habitat*, II 16-17, Ochsenkun (b) *Pater noster*, I 118-19, Francesco da Milano.

Phrygian versus Sostenido Interpretations

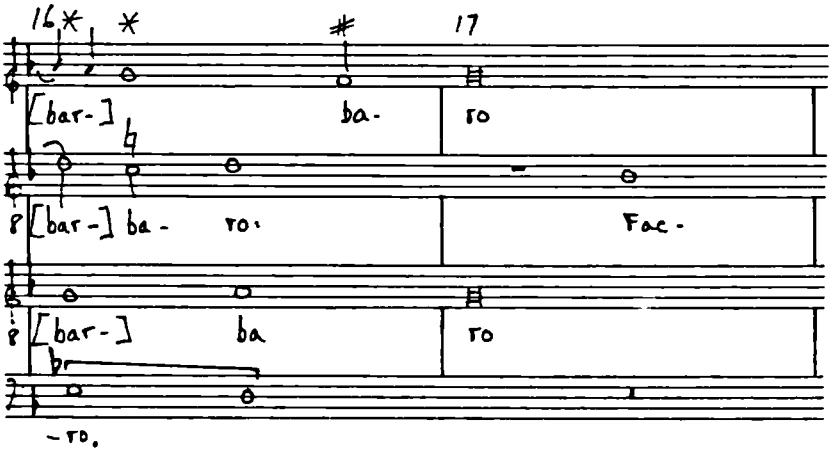
A number of clausulae could be interpreted either as Phrygian or as sostenido cadences. In cases such as that shown in Ex. 22, the approach to the cadence-note D from the closest imperfect interval could be achieved in two ways--by raising the C or by lowering the E. Francesco Spinacino chose to incorporate the subsemitone whereas the editor of the vocal source, Motetti C (Venice, 1504) preferred to lower the E.

Ex. 22. Ave Maria, 24-25.



At other clausulae (see Ex. 23), the subsemitone was precluded and the adoption of the Phrygian form of the cadence enabled those performers who wished to avoid the tritone to approach the cadence-note from the closest imperfect interval without incurring dissonance.[23]

Ex. 23. In exitu, I 16-17.



Raised Thirds Above Cadence-Notes

The final category of cadential procedure that remains to be discussed concerns the raising of thirds above cadence-

notes. The intabulators exhibit a wide variety of practices in this regard which demonstrates that the theorists' statements on this matter were by no means universally applied.[24] The clausula shown in Ex. 24 typifies the diversity of approach. Four of the six instrumentalists raise the third and, interestingly,

Ex. 24. Pater noster, II 76-end.

this produces chromaticism (B^{b}-B♮) in the intabulations by Francesco da Milano and Simon Gintzler. The division of the quinta vox's longa into shorter values enabled both lutenists to delay the incorporation of the B♮ until the very last moment.

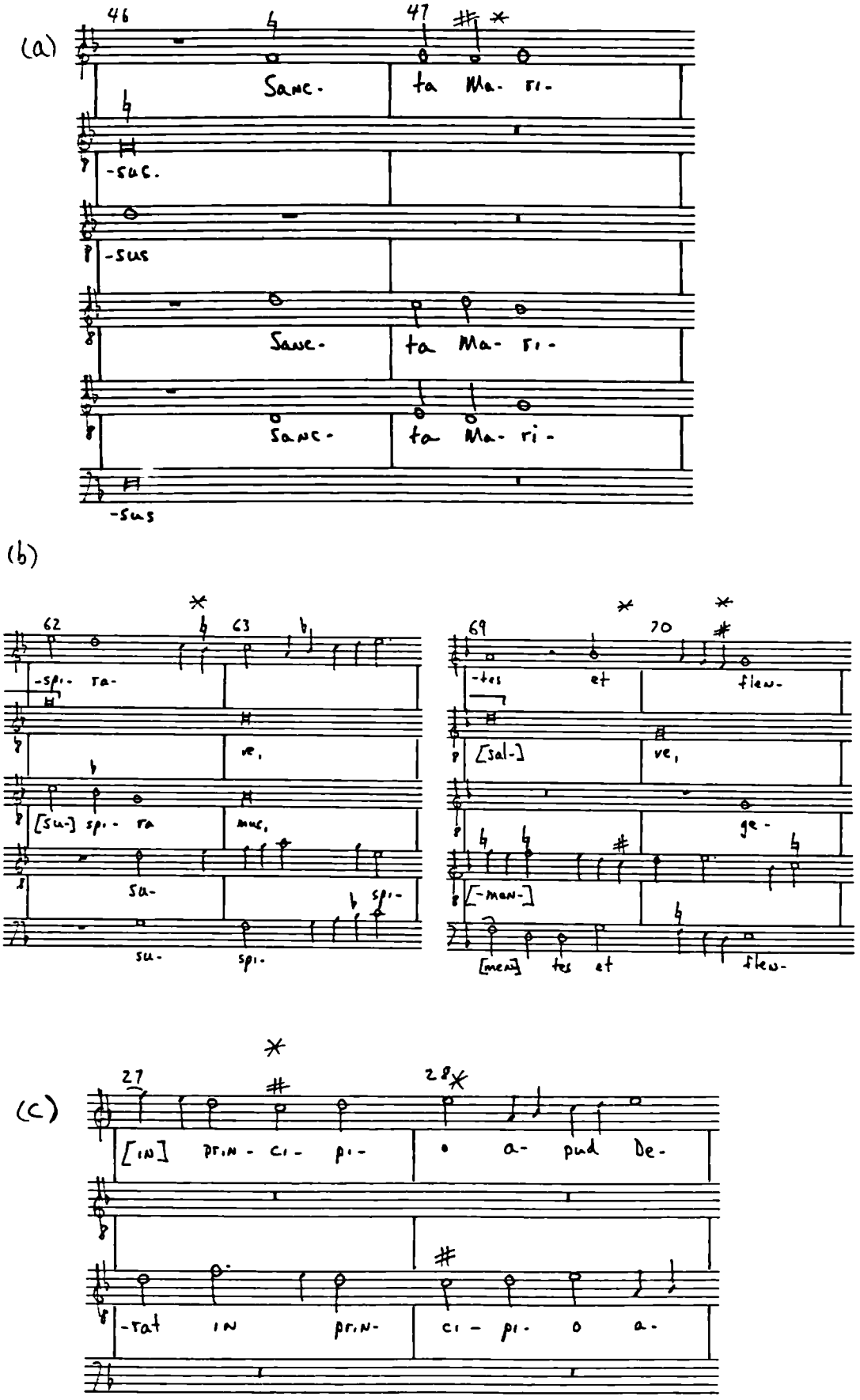
The vocal sources of the five motets for which variants were collected never specify the raised third except for one occasion in the secunda pars of Inviolata. At the final cadence, sharp signs are notated in the manuscript Mod 9, thereby indicating that this cadence is to contain the raised third. Antonio de Cabezon is the sole intabulator to incorporate this raised third as both Hans Gerle and Sebastian Ochsenkun leave the note uninflected.

Nonc dential Uses of the Semitone

'Sol Fa Sol' Progressions Containing a Semitone

The intabulations tend to confirm statements made by theorists that progressions solmized 'la sol la', 'sol fa sol' and 're ut re' were regularly sung with a semitone.[25] Josquin's motets offer numerous opportunities for us to verify this assertion, and Ex. 25 presents a selection of the passages concerned. In

Ex. 25. (a) Pater noster, II 46-47 (b) Salve regina, 62-63 & 69-70 (c) In principio, 27-28.

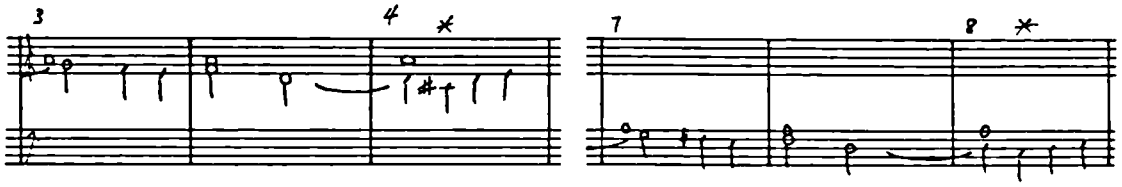


this example, the inclusion of the semitone creates nonharmonic relations with the previous and following unaltered notes. Although these false relations did not preclude the incorporation of the semitone, the prohibition against mi contra fa did force Francesco da Milano to omit the semitone in at least one passage (compare the bassus and superius ornamental figures):

Ex. 26. Stabat Mater I 29, Francesco da Milano.

Of course, the consistent application of this semitone principle was not always the prime concern. Miguel de Fuenllana, for instance, treats certain figures differently on each repetition (see Ex. 27).

Ex. 27. Benedicta es, I 3-4 & 7-8, Miguel de Fuenllana



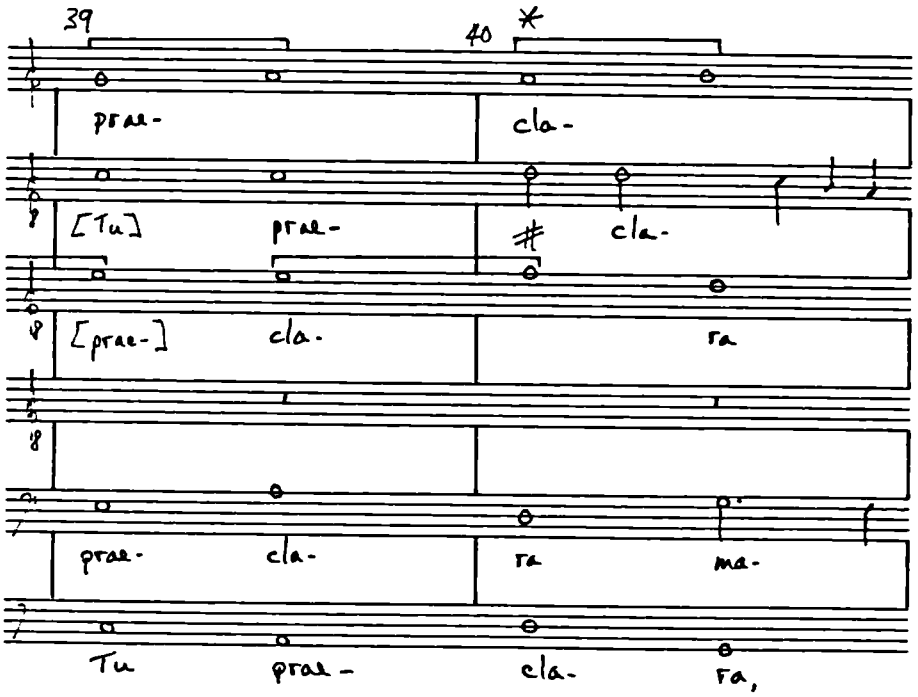
The subsemitone in Noncadential Passages

A number of the intabulators introduce the subsemitone in passages which do not lead to a cadence. The strong

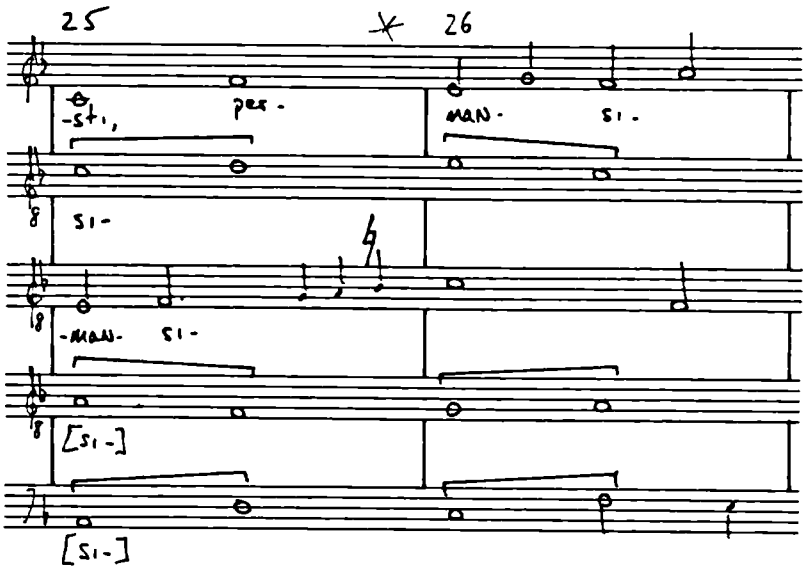
pull to the structural foundations of the modes frequently led the instrumentalists to approach perfect intervals from the closest imperfect intervals even if the perfect intervals were not part of a clausula. Thus, the intabulations support Bermudo's claim that this practice applies beyond cadential situations.[26] The following passages are typical.

Ex.28. (a) Benedicta es, I 39-40
(b) Inviolata, III 25-26
(c) Qui habitat, I 47-49.

(a)



(b)



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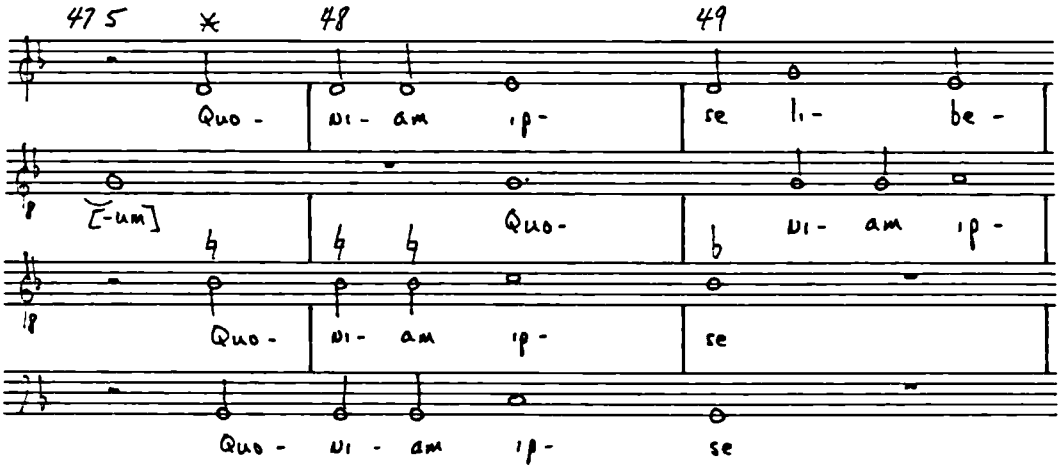


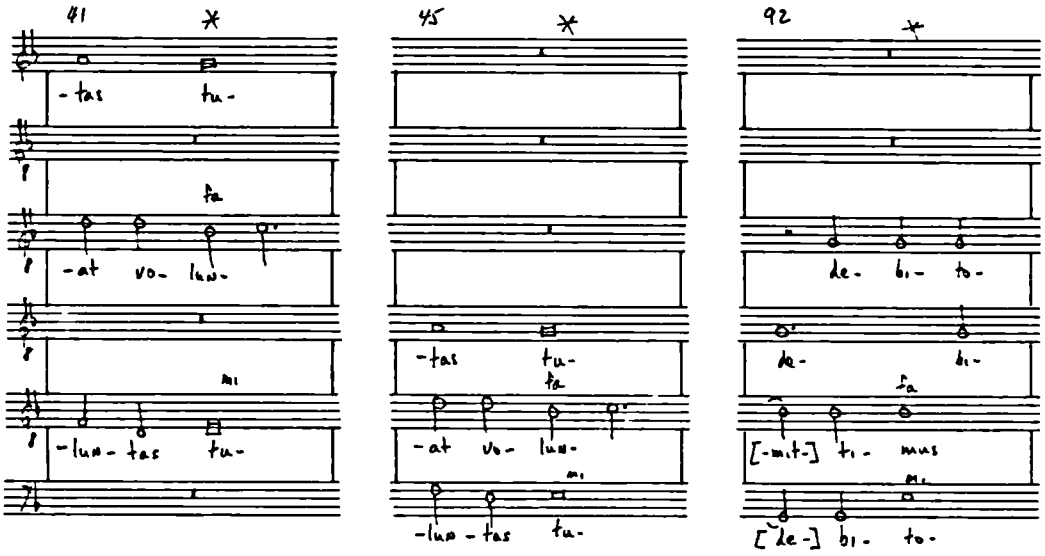
Treatment of Vertical Dissonance

Mi Against Fa

The intabulations provide numerous examples of passages in which mi contra fa was both eliminated and retained. The most common method of removing this dissonance was through the introduction of a flat and on

several occasions virtually all of the sources, both vocal and instrumental, were in complete agreement. In the prima pars of Pater noster, for instance, mi contra fa was eliminated in every source, except one vocal manuscript, in each of the following cases (see Ex. 29). Today, one might consider the simultaneous sounding of E

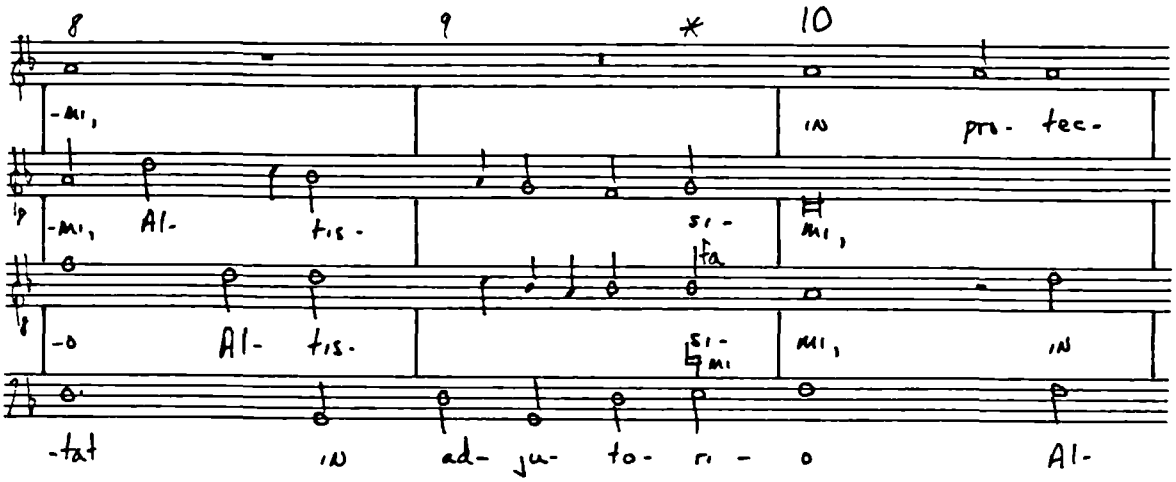
Ex. 29. Pater noster, I 41, 45 & 92.



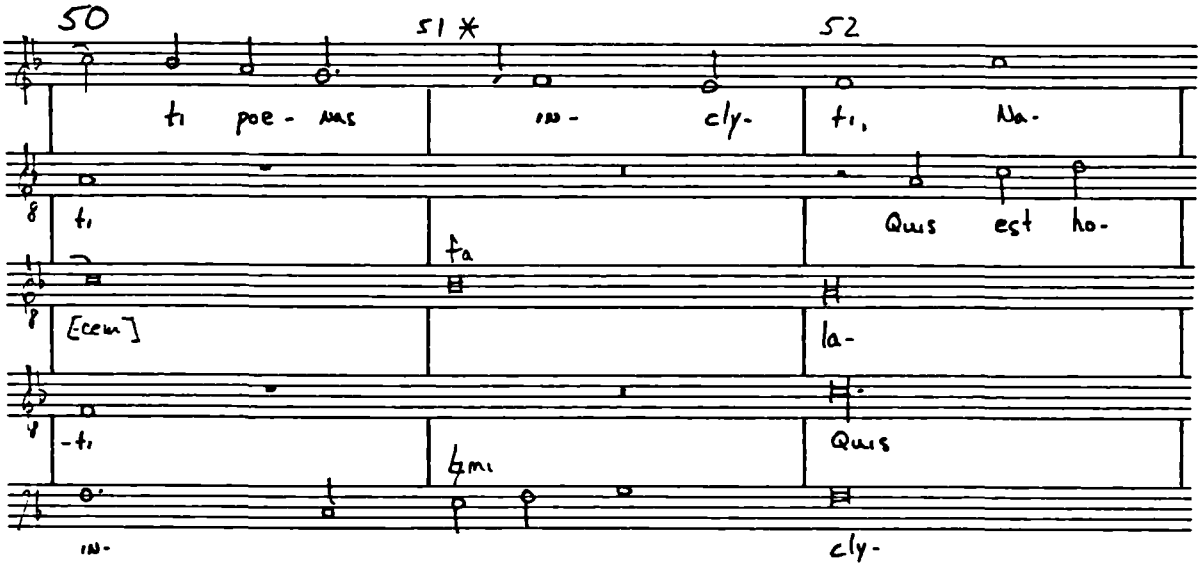
against B^b in these examples to be an obvious application of the theorists' dictum prohibiting mi contra fa but such an approach, the most common in the intabulations, was not taken in other similar situations. In at least eighteen separate passages, mi against fa was retained in the intabulations and Ex. 30 presents four instances of this practice.

Ex. 30. (a) Qui habitat, I 8-10 (b) Stabat Mater, I 50-52
(b) In exitu, I 134-35 (c) Benedicta es, I 83-85.

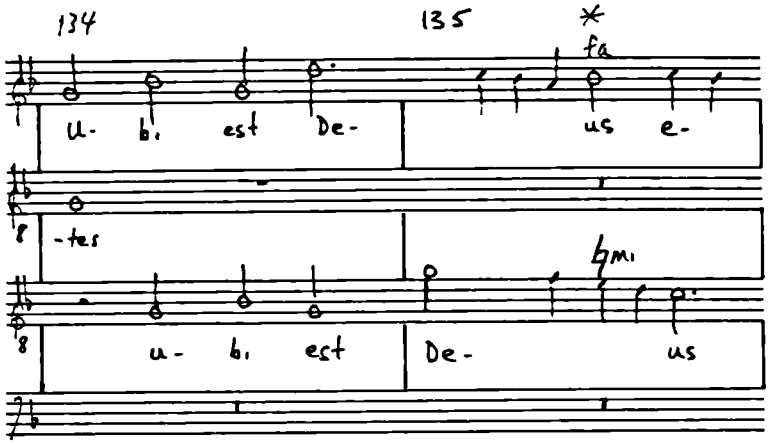
(a)



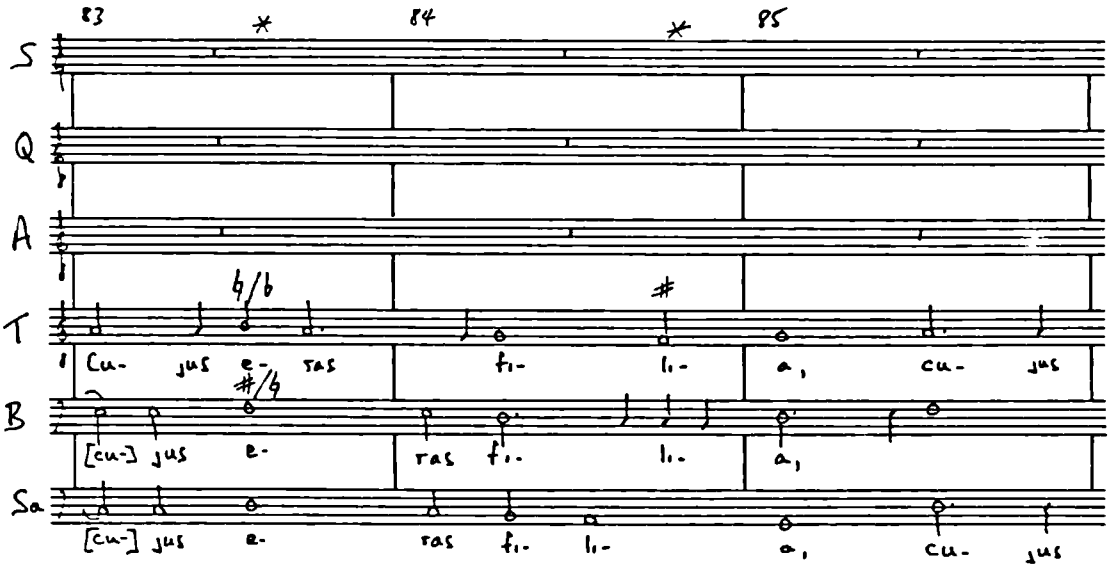
(b)



(c)


134
135
fa
u- bi est De- us e-
-tes
hmi
u- bi est De- us

(d)


83
84
85
S
Q
A
T
B
Sa
Cu- jus e- ras fi- li- a, cu- jus
[cu-] jus e- ras fi- li- a,
[cu-] jus e- ras fi- li- a, cu- jus

Throughout these four examples, no consensus exists among the intabulators, and both the removal and the retention of the dissonance appears to have been within the sphere of normal practice. Bermudo, in fact, probably would have condoned the mi contra fa in parts (a) and (b) because in Qui habitat, the dissonance is prepared by the repeated B^b and in Stabat Mater, the E proceeds directly to an octave on F. The momentary passing dissonance in In exitu was obviously inoffensive to one intabulator, the German lutenist Sebastian Ochsenkun, but the treatment of the vertical tritone between F and B in Benedicta es was complicated by melodic considerations. This last passage, which embodies the classic dilemma cited by Pietro Aaron,[27] contains both linear and vertical tritones, and the performer must decide which consideration, melodic or harmonic, should take precedence. Three of the intabulators give priority to the melodic consideration and eliminate only the linear tritone. The remaining five intabulators, however, regard both factors to be of equal importance. Each of the performers in this latter group remove the melodic tritone by raising the tenor's F for the cadence on G in m. 85, but the vertical tritone is eliminated in either of two ways: some lower the B, through the fa supra la convention, while others raise the F (m. 83) in preparation for the cadence. All of these solutions were independently adopted by more than one performer and represent standard Renaissance procedure.

Nonharmonic Relations

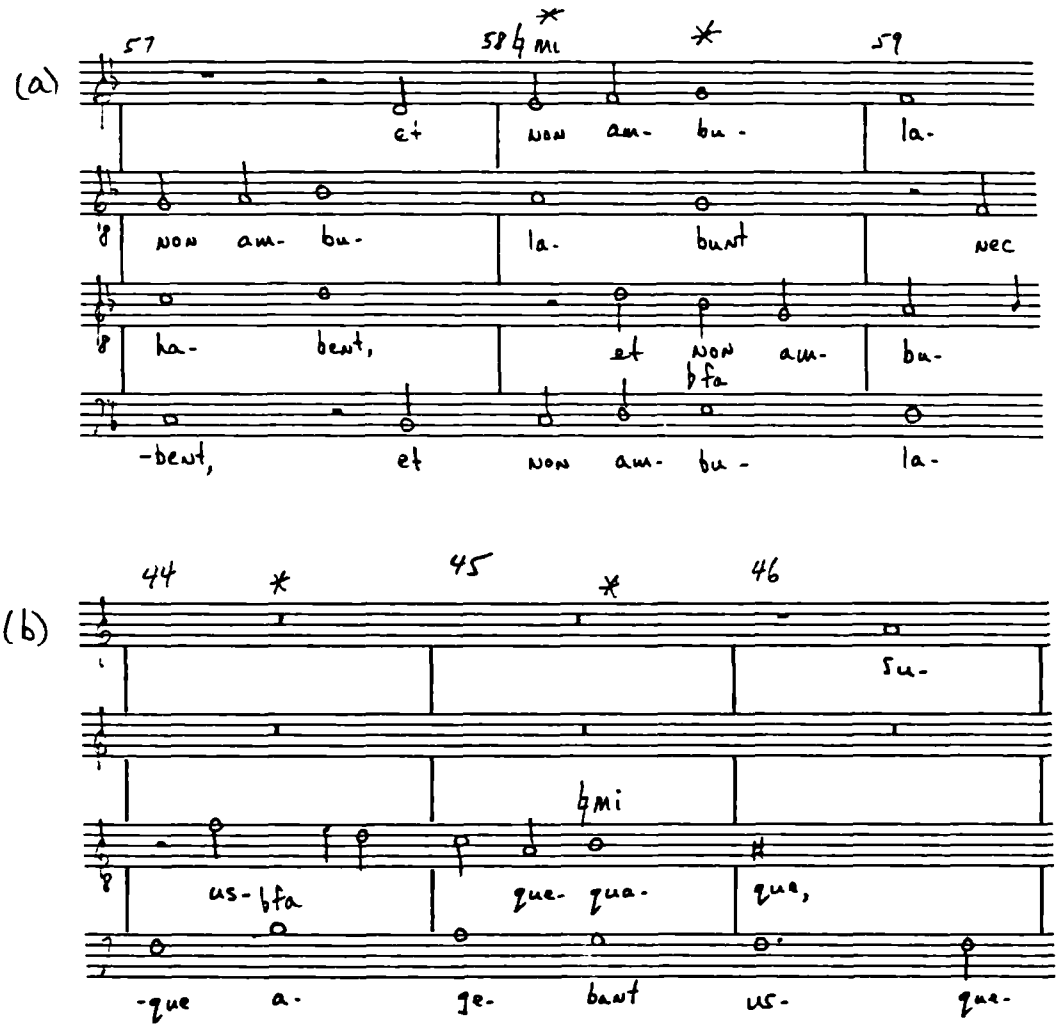
The intabulations substantiate Zarlino's claims that "... it is not so vital to avoid nonharmonic relations [in compositions for many voices]..."[28] Moreover, the frequency with which the mi-fa clash occurs in the intabulations suggests that these clashes were an important part of the Renaissance 'sound ideal'. Repeatedly, these false relations reveal that the sixteenth-century musician must have regarded this type of dissonance as a normal part of the style. In each of the following examples, the dissonance occurs as a by-product of the linear thinking which both singers and instrumentalists applied to the performance of vocal music. Thus, the voice-parts are governed by their own inner logic and generate the types of nonharmonic relations that Renaissance musicians expected to incur:

> "And [as a result of] the way singers have their ears trained-- to hear what is in an individual line--it [the diminished fourth] is employed in composition,..."[29]

The nature of Josquin's part-writing is such that the mi and the fa are often separated in time by a minim or by a semibreve, thereby weakening the effect of the

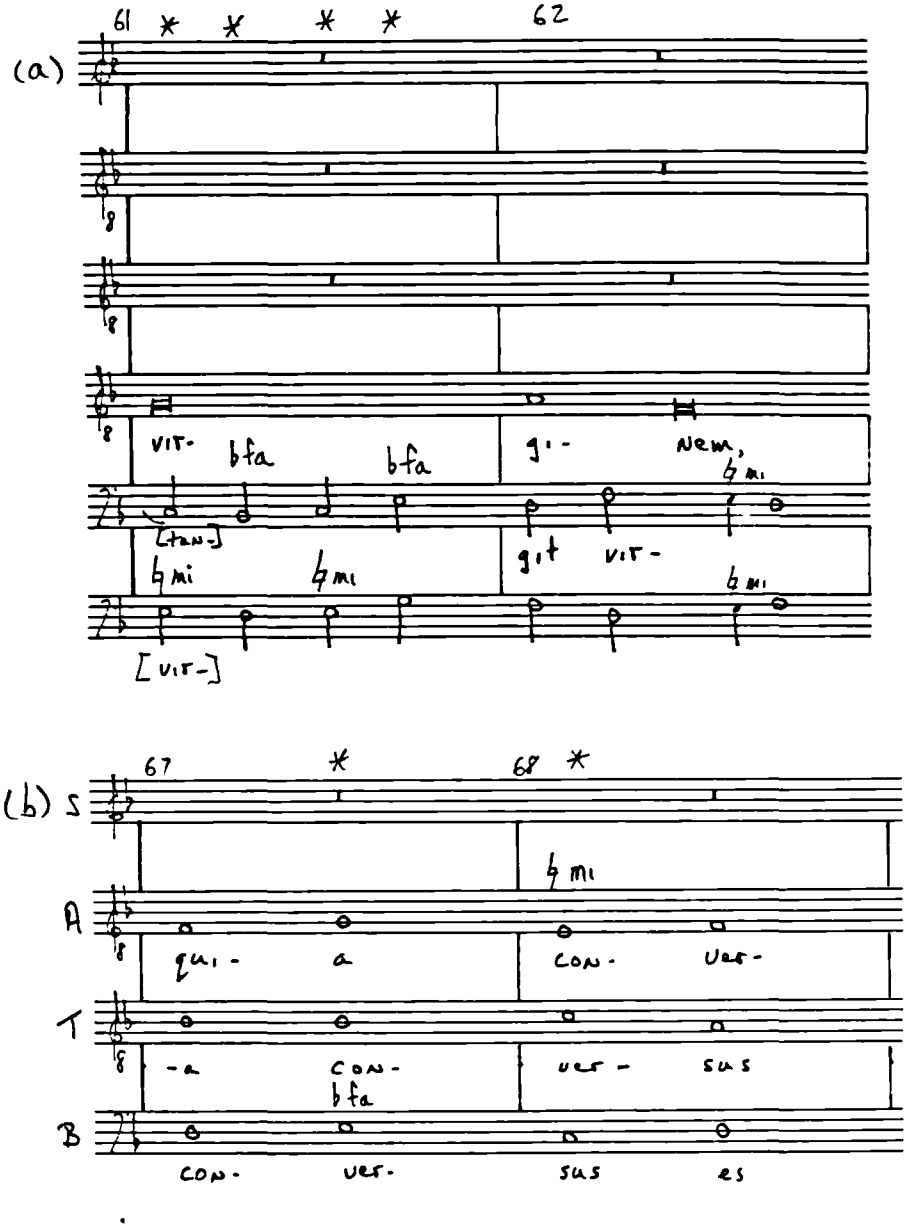
dissonance (see Ex. 31).

Ex. 31. (a) In exitu, II 57-59 (b) Memor esto, I 44-46.



But when the two notes are adjacent to one another, the clash becomes most striking (see Ex. 32).

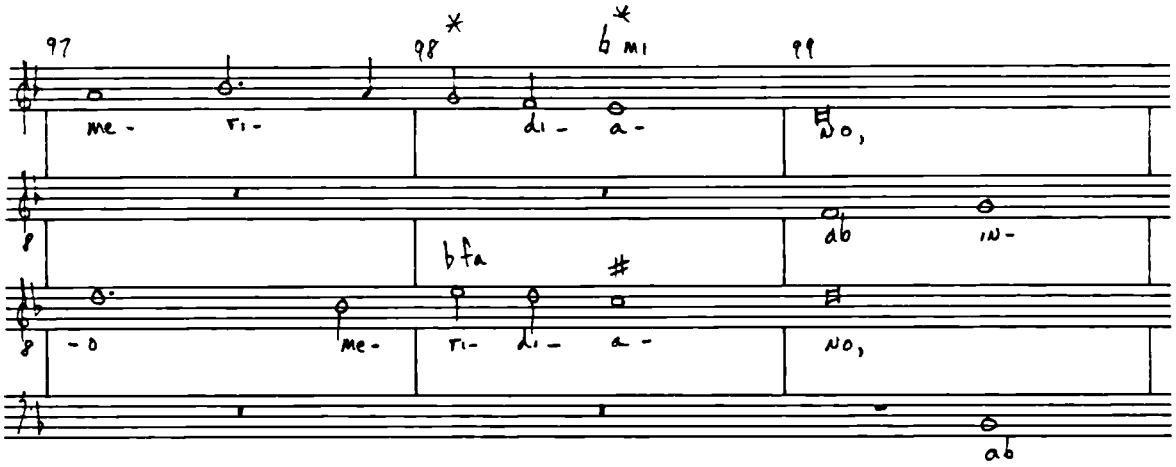
Ex. 32. (a) Praeter rerum, I 61-62 (b) In exitu, I 67-68.



The relations exhibited in this last example are predictable by-products which emerge from the independent interactions of the voice-parts. The dissonance encountered in In exitu, for instance, results from an E fa, introduced to avoid mi contra fa between the tenor and the bassus, that clashes with the E mi of the altus.

Inevitably, these relations are found even in two-part writing where Zarlino expressly prohibits them[30] (see Ex. 33).

Ex. 33. Qui habitat, I 97-99.



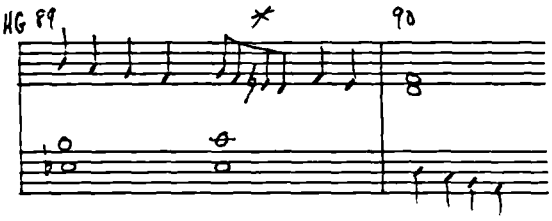
'Punto intenso contra remisso'

The simultaneous sounding of dissonant octaves is occasionally employed within the ornamentation that various instrumentalists add to the vocal model. This occurs in both cadential (see Ex. 34) and noncadential (see Ex. 35) passages, thus furthering the documentation of this sixteenth-century practice provided by Francisco Correa de Arauxo and Willi Apel.[31]

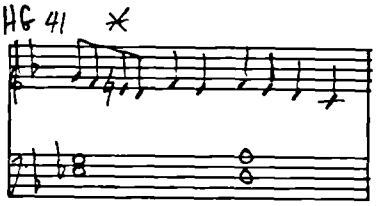
Ex.34. (a) Inviolata, I 20-21 (b) Benedicta es, I 64-65 (c) Qui habitat, I 89-90.

(b)

(c)



Ex. 35. Qui habitat, I 41.

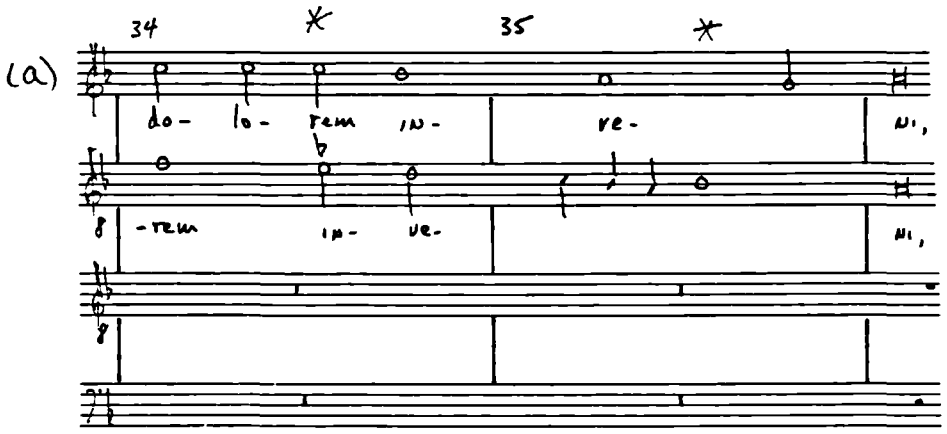


Treatment of Melodic Dissonance

The Tritone

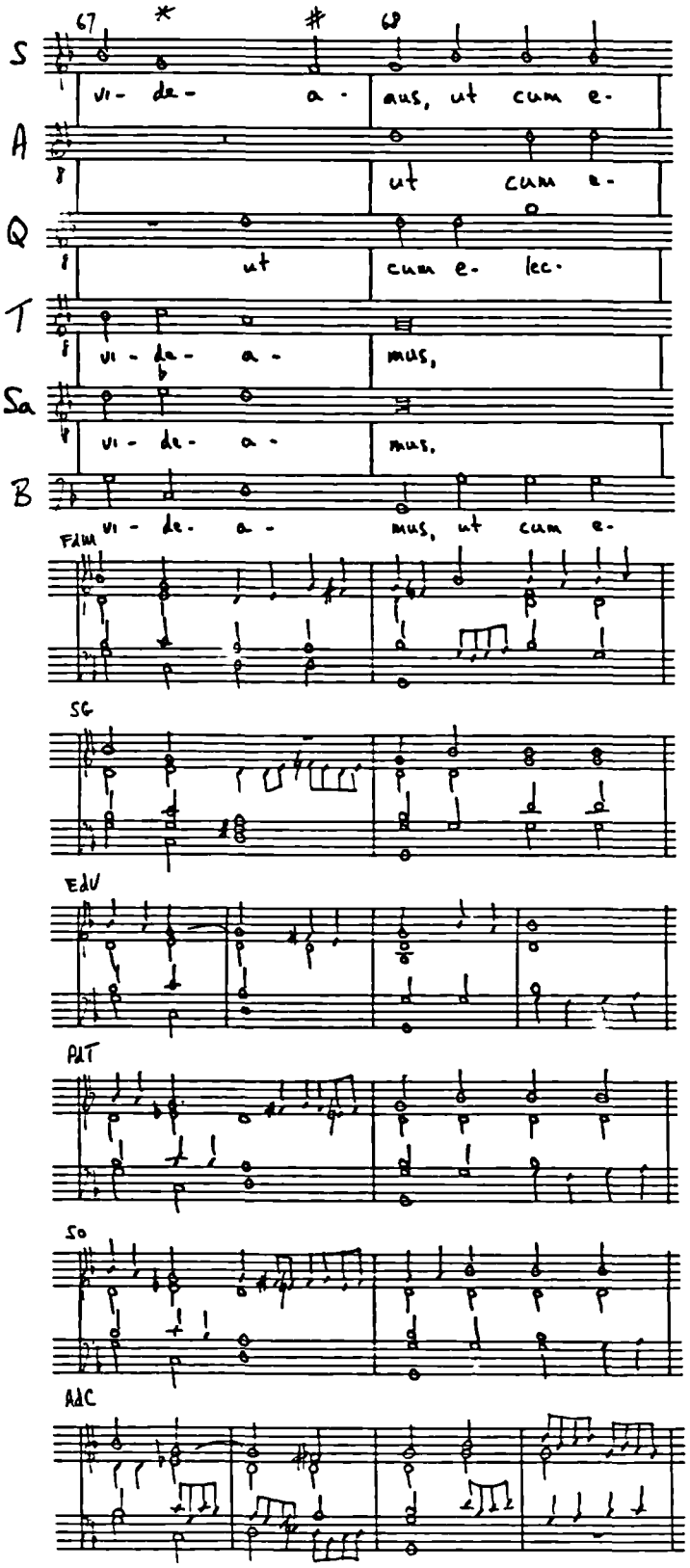
The intabulations reflect the flexibility with which the theorists discuss the prohibition of the melodic tritone. The instrumentalists regularly eliminate the tritone whether it emerges in a stepwise progression or as a leap (see Ex. 36).

Ex. 36. (a) Tribulatio, 34-35 (b) Stabat Mater, I 33-34.



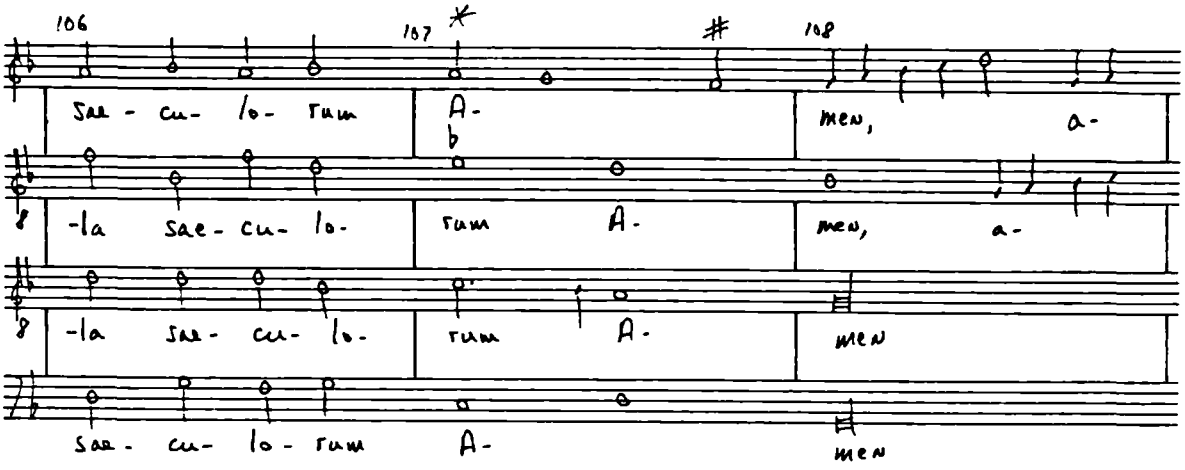
But when more than one solution to a problematic passage is feasible, the performers exhibit their individual predilections. In Pater noster, for instance (see Ex. 37), the stipulation of a flat to remove the melodic tritone in the sexta vox creates a nonharmonic relation with the E♭ introduced into the cadential ornamentation. Pierre de Teghi and Sebastian Ochsenkun choose to incur this false relation, a by-product of the sexta vox and the superius working independently of each other, whereas Francesco da Milano, Simon Gintzler and Enriquez de Valderravano prefer the opposite, that is, to incur the melodic tritone in order to avoid the nonharmonic relation.

Ex. 37. Pater noster, II 67-68.



Furthermore, the introduction of a flat to remove the tritone could, at times, create mi contra fa (see Ex. 38).

Ex. 38. In exitu, III 106-08.



In this passage, the intabulator, Sebastian Ochsenkun was obviously more concerned with eliminating the linear dissonance than he was with avoiding mi against fa.

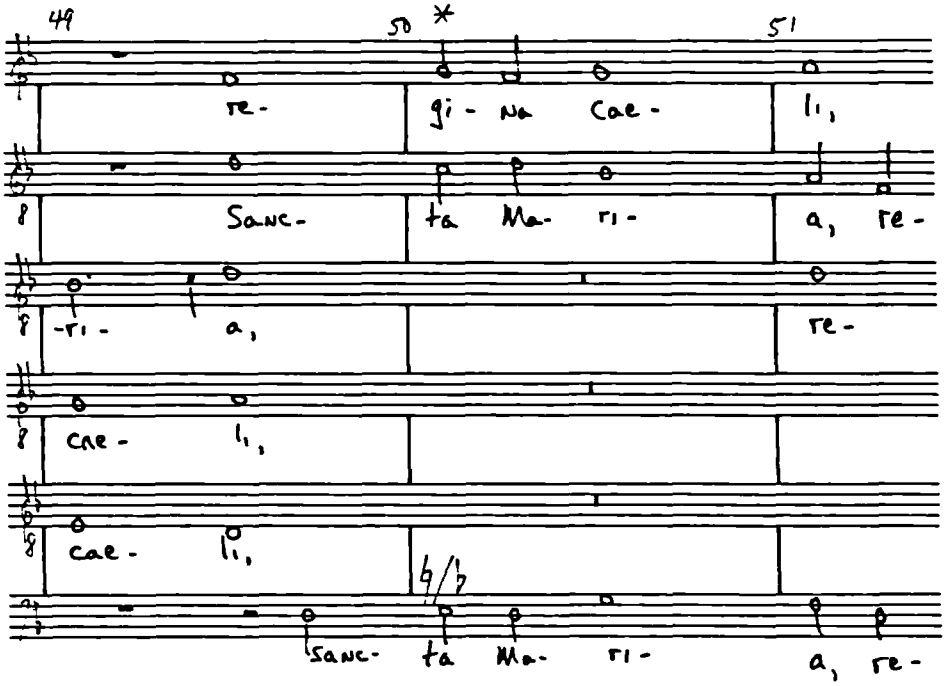
The 'Fa Supra La' Convention

The intabulators frequently applied the 'fa supra la' convention to Josquin's motets even when the melodic tritone itself, the reason for the convention, was not present. Repeatedly, the progressions A-B-A and D-E-D were rendered with flats (see Ex. 39).

Ex. 39. (a) Memor esto, I 112-13 (b) Ave Maria, 33-35

However, as with most of the other practices discussed in this dissertation, the instrumentalists treated certain passages in various ways. In fact, the 'fa supra la' convention was not applied by all the performers every time the opportunity arose and in Ex. 40, four of the six arrangers chose to retain the E ♭ in the bassus.

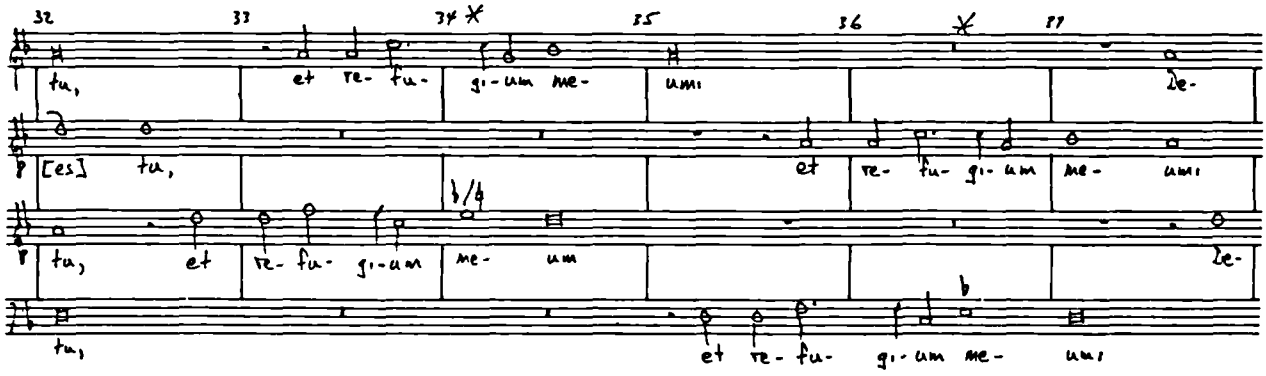
Ex. 40. Pater noster, II 49-51



Treatment of Repeated Material

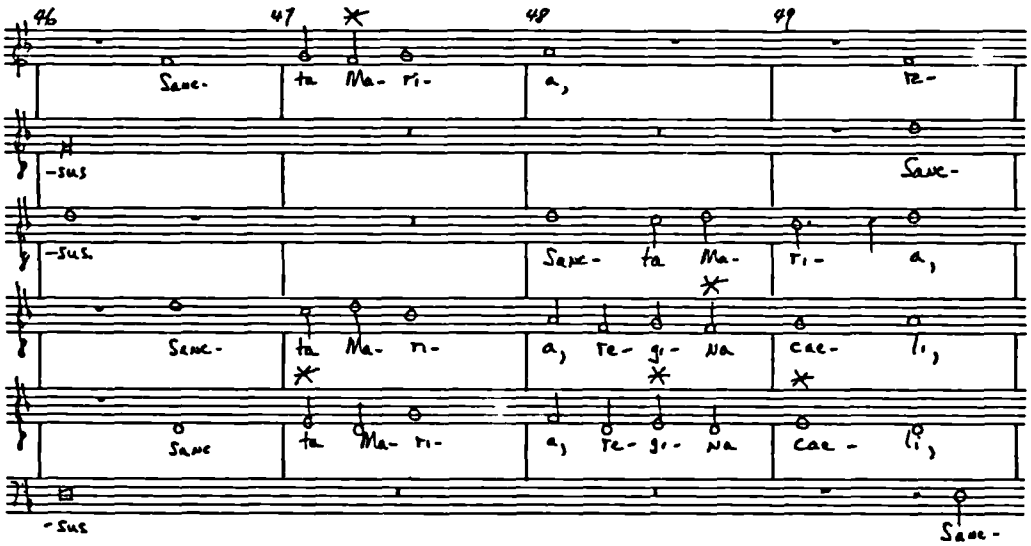
The intabulations document the degree to which the various instrumentalists interpreted the pitch content of repeated material consistently. As one would expect, no uniform practice exists. For example, certain instrumentalists treated a mimetic passage in Qui habitat as a fuga whereas at least one other performer treated it as an imitazione[32] (see Ex. 41). A similar diversity of approach

Ex. 41. Qui habitat, I 32-37.



exists in the intabulations of Pater noster. The section of the motet shown in Ex. 42 is stated four times in succession and the instrumentalists adopted several solutions to the pitch content of this passage. Four of them uniformly applied their solutions to each repetition but two performers, Francesco da Milano and Sebastian Ochsenkun, vary their interpretations of this passage on its successive restatements (see Ex. 42).

Ex. 42. Pater noster, II 46-49.



1 - 4	Gintzler	e^{b} $f^{\natural}$	e^{b} $f^{\natural}$ e^{b}
	Teghi	e^{b} $f^{\natural}$	e^{b} $f^{\natural}$ e^{b}
	Valderravano	$e^{\natural}$ $f^{\#}$	$e^{\natural}$ $f^{\natural}$ e^{b}
	Cabezon	$e^{\natural}$ $f^{\#}$	e^{b} $f^{\natural}$ e^{b}
	Francesco 1	$e^{\natural}$ $f^{\#}$	e^{b} $f^{\natural}$ $e^{\natural}$
	2, 3 & 4	$e^{\natural}$ $f^{\natural}$	$e^{\natural}$ $f^{\natural}$ $e^{\natural}$ (Francesco omits the last 'e' on the 2nd statement)
	Ochsenkun 1 & 2	$e^{\natural}$ $f^{\natural}$	e^{b} $f^{\natural}$ e^{b}
	3 & 4	e^{b} $f^{\natural}$	e^{b} $f^{\natural}$ e^{b}

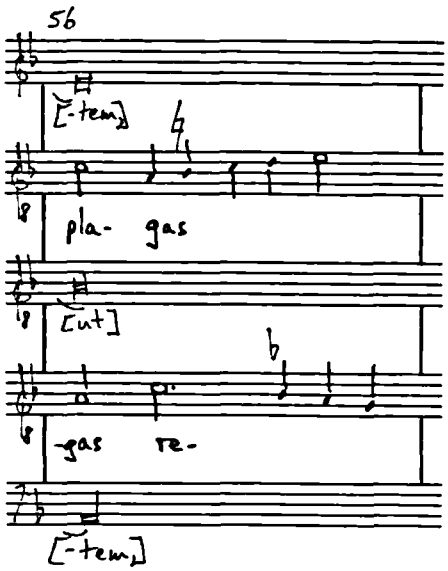
These examples demonstrate that the consistent application of the precepts and conventions discussed in Chapter IV was not of primary concern to all the instrumentalists.

Treatment of Ascending and Descending Lines

The practice of raising certain pitches in ascent and lowering them in descent is occasionally encountered in the intabulations. This occurs within the ornamentation added to the model (see Ex.43) and in undecorated sections (see Ex.44). However, this procedure was by no means universally adopted because these pitches were also raised in descent (see Ex. 45).

Ex. 43. (a) Stabat Mater, I 1-2, Francesco da Milano
(b) Pater noster, I 4, Sebastian Ochsenkun

Ex. 44. Stabat Mater, II 56.



Ex. 45. (a) Pater noster, I 4, Francesco de Milano

(b) Stabat Mater, I 74-75.

(a)

* * * * * * * * *

The preceding study demonstrates that the instrumentalists exercised as much flexibility in applying theoretical precepts and conventions as the theorists exercised in discussing them. Individual predilection played an important role in determining specific procedures, especially in ambiguous passages where more than one solution was within the bounds of normal sixteenth-century practice. Both the theoretical sources and the intabulations confirm that the parameters of sixteenth-century style, particularly with regard to dissonance treatment, were broad. Consequently, the subsemitone was not precluded by upper or lower voice-parts and the removal of mi contra fa, nonharmonic relations and melodic tritones depended on the level of dissonance that each musician desired in his arrangement. Since neither the precepts nor the conventions discussed in this dissertation were immutable during the Renaissance, perhaps our modern view of these matters should reflect this fact.

CHAPTER VI

ABSALON, FILI MI

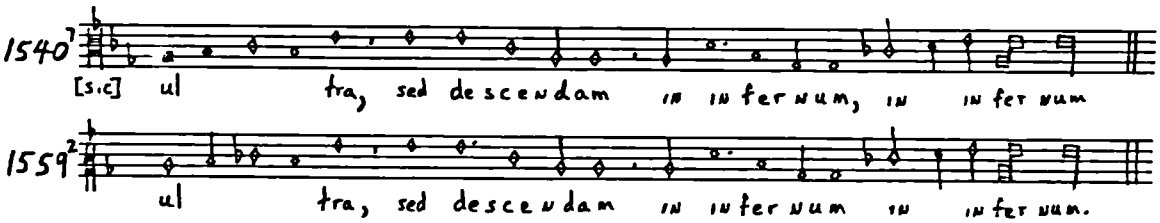
In the previous two chapters, the theoretical framework surrounding the incorporation of chromatic signs has been established and the various manners in which sixteenth-century performers applied theoretical precepts and conventions in Josquin's motets has been documented. This final chapter, through an examination of pitch content and modal procedure in one of Josquin's most problematic motets, Absalon, fili mi, will demonstrate that the comparative study of all the extant sources of a work is indeed useful for increasing our understanding of individual compositions.

* * * * * * * * *

Four sources of Absalon, fili mi survive: British Library, Royal 8 G vii, ff.56^{v}-58; Selectissimae necnon familiarissimae cantiones (Augsburg, 1540^{7}), No.24; Sebastian Ochsenkun, Tabulaturbuch auff die Lauten (Heidelberg, 1558$_{5}$), No. 14, f. 30; and Tertia pars magni operis musici (Nurnberg, 1559^{2}), No. 10.[1] Of these sources, the 1540 and 1559 editions of Absalon are virtually identical, differing in that 1559^{2} contains a more accurate text-underlay[2] and a correction to the clef which was misplaced in the final stave of the tenor part of 1540^{7}. The later edition also clarifies

whether the E^b at the beginning of this stave was intended to be part of a new signature or a preplaced sign (Ex. 1).

Ex. 1. Tenor, 1540^7 and 1559^2.



No change in signature occurs in 1559^2 at this point and the desired alteration in pitch is effected by flat signs placed before those Es which require them. Presumably, the E^b in 1540^7 was never intended to be part of a new signature but was positioned at the beginning of the stave in order to warn the singer of an approaching fa on E. Additio al evidence in support of this supposition is that if the E^b actually indicated a new signature, then the inclusion of the flat sign before the final E of the stave would have been redundant. In fact, of the three Es occurring in this stave, the only two that should bear flat signs, at least according to Royal 8, 1559^2 and Ochsenkun's intabulation, are the first and third: this demonstrates the localised nature of these signs.

The most striking differences between the printed editions[3] of Absalon and the British Library manuscript version are a pitch level a ninth lower in Royal 8[4] and the utilisation of differing signatures in this manuscript, which causes the apparent lack of the

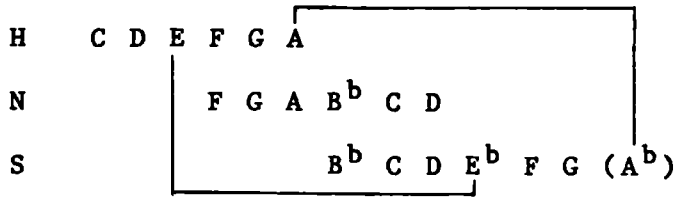
requisite chromatic signs in the discantus and altus. The interpretation of differing signatures is a ubiquitous issue and has been the subject of numerous theories and debates.[5] However, with Absalon, owing to the nature of the surviving sources, the implications of the signatures in Royal 8 can be realised with a degree of precision that is probably not possible for many other works. But before considering this problematic reading, let us examine 1540[7] in order to ascertain the manner in which the work unfolds in a version that specifies the pitch content unambiguously.

The piece begins with a fuga, each voice repeating the others' solmization syllables. In this way, the voices outline and establish the species of fourths and fifths characteristic of the Lydian mode in cantus mollis position:

Discantus	ut to fa	Hard hexachord on C
Contratenor	ut to fa	Natural hexachord on F
Tenor	ut to fa	Hard hexachord on C
Bassus	ut to fa	Natural hexachord on F

Josquin pairs the voices hexachordally, discantus/tenor and contratenor/bassus, and this coupling is retained in each subsequent fuga.[6] The signature of one flat

associated with this mode indicates the transposition of the hexachord system from hexachords built on G, C and F to those built on C, F and B^b.[7] Inherent in this transposed system are two areas of oscillation--one, E/E^b, resulting from the Emi-Efa relationship between the hard and soft hexachords and the other, A/A^b, from the semitone extension to the soft hexachord created by the application of the fa supra la convention:



Thus E^b becomes an implicit part of cantus mollis Lydian and A^b an extension to the outer boundaries of the hexachord order. Within this mode, then, one would expect to encounter E^bs and the appearance of A^bs, while extending the system to its natural limits, would not be inconceivable.[8] Indeed, a quick check of the chromatic signs occurring in this version of Absalon reveals that E^bs and A^bs are the only ones designated. But how does the introduction of these signs affect modal procedure and how does Josquin use the oscillatory nature of the cantus mollis Lydian mode to create the hypotyposis figures[9] necessary for underlining the closing words of the text?

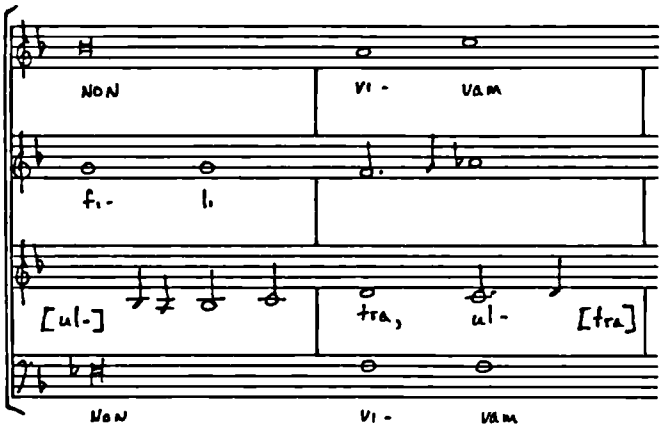
For most of the piece, the modal procedure follows normal practices. In fact, throughout Absalon the music remains anchored to the structural foundations

of the mode. The species of fourths and fifths are constantly being reiterated and all the cadences, with the exception of two transitory ones on G, are either on the principal cadence-notes F and C or on the secondary note A.[10] Only in the sections bearing the words *non vivam ultra sed descendam in infernum plorans* (mm. 52-68 and their repeat in mm. 69-85) does modal procedure become somewhat obscure.[11] In order to set these words appropriately, Josquin utilises the oscillatory nature of the hexachord order to prepare for the descent to inferno.

Interestingly enough, the introduction of the first specified chromatic sign, an E^b (m. 52), coincides with the new text and discloses that side of the mode which tends in the flatward direction. In this case, the E^b is essential for the avoidance of *mi contra fa* and is employed in an *anaphora*[12] in which the bassus, the *dux* voice, is paired with the contratenor, the *comes* voice.[13] Josquin uses the *comes* voice of this incomplete *fuga* to maintain an E^b in the *concentus* while the tenor and bassus cadence on C (m.56). Hence the reason for the appearance of an E^b (m.56) at a point where no vertical dissonance is in need of correction.

Directly following this E^b is an A^b in the contratenor at m. 53 (see Ex. 2). Two solmizations are possible for this note: a semitone extension to the soft hexachord

Ex. 2. 1540[7], mm. 52-53.



through the fa supra la convention or a mutation to a fictive hexachord on E^b. The contratenor phrase containing this A^b originates in m. 50 as the comes voice of an anaphora which overlaps with the dux voice of the anaphora just discussed. The phrase begins in the natural hexachord on F and the opening leap reiterates the fourth species of fifth, thus retaining a clear link with the mode. But in order to negotiate this A^b, the singer must at some point mutate to the soft hexachord (probably on the second G in m. 52), and the placement of a flat before the A ensures the singer's recognition of the fa supra la convention. The alternative solmization for this note requires the singer to mutate to a fictive hexachord on E^b but as mutation outside the transposed system can be avoided, the semitone extension to the soft hexachord is the preferable explanation.

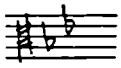
The two overlapping *anaphorae* draw to a close with the *comes* voice of the second *anaphora* cadencing on C (m. 60), and it is at this point that the text *sed descendam in infernum plorans* first appears.[14] Josquin depicts the descent to inferno by employing the musical-rhetorical figures *fuga* and *climax*.[15] As in previous *fugae*, Josquin pairs the tenor with the discantus and the bassus with the contratenor. Each interlocked pair progresses downwards by means of a *climax*[16] in which melodic fragments are repeated on successively lower steps. For the tenor and the discantus, this repetition entails a mutation from the hard hexachord directly to the soft and for the bassus and contratenor, from the natural hexachord to a fictive one on E^b. That Josquin intended a fictive hexachord to be invoked at this point is evident from the structural implications of *fugae*. In order for each voice to effect an exact duplication of the others' solmization syllables, a fictive hexachord on E^b is necessary and it is no coincidence that in both 1540^7 and 1559^2 the employment of this fictive element corresponds with the text *in infernum*. The bassus A^b in m. 66 is thus easily accommodated in theory and practice by this fictive solmization.

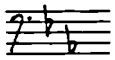
The result of combining this *fuga* with the descending *climax* is the creation of a chain of fifths--C, F, B^b, E^b, and A^b.[17] Consequently, Josquin's imaginative setting of the text makes full use of the oscillatory nature of the hexachord system while allowing him to retain modal control. His unambiguous employment of the species of *cantus mollis* Lydian throughout this section and his adherence to the structural foundations of the mode demonstrate Josquin's mastery of the modal medium.

With this discussion of 1540^7 in mind, the question of pitch content in Royal 8 can now be approached on firmer ground. If one assumes that the primary purpose of music notation is to convey the text of a work to the performer, then more than one means of transmitting that information may be available. Such could be the case with 1540^7 and Royal 8 because, in essence, the only disparities between the two versions, other than the minor variants given below (see p. 172), involve questions of text-underlay, overall pitch-level, the transposition of the *tritus* mode to E^b and the use of differing signatures to disclose the pitch content of the work. However, not all methods of presenting the text do so with the same degree of clarity. 1540^7 is relatively free from notational problems, which allows the structure of *Absalon* to be readily comprehensible; but unfortunately the same cannot be said of the version in Royal 8. On the surface, the differing

signatures create notational ambiguities which impede the assimilation of Absalon's pitch content; if the work is to be understood, the missing pieces of information must be supplied by the performer or editor.

Three signatures are present in Royal 8:[18]

B^b and E^b: Discantus  Contratenor 

E^b and A^b: Tenor 

E^b, A^b and D^b (?E^b?): Bassus 

Among these, only the bassus signature is problematical and two questions surrounding this signature arise:

1. Does the D^b apply to the upper octave?

2. Is the D^b an error in which the scribe mistakenly copied D^b instead of E^b?

Neither of these questions can be answered conclusively by considering the Royal 8 version on its own. Fortunately, 1540^7 provides insights into these problems.

In order to address the first question, the observation must be borne in mind that even though signature

flats of this time could indicate a transposition of the hexachord system, they did not always govern their upper or lower octaves; if these pitches were required, the signature often carried an indication of this.[19] The D in m. 42, therefore, probably should not be interpreted as a D^b but should remain a D♮. 1540[7] substantiates this supposition;[20] reminding us that in their implications early signatures bear only partial resemblance to their modern counterparts.

The answer to the second question is more speculative, and conflicting evidence within the source prohibits firm conclusions. If it is true that signatures indicate hexachord transposition, then the signature as it stands in Royal 8--E^b, A^b, D^b--prevents the singer from solmizing the D♮ without mutating outside the transposed system:[21]

H E^b F G A^b B^b C
N A^b B^b C D^b E^b F
S D^b E^b F G^b A^b B^b (C^b)[22]

Changing the signature to E^b, A^b, E^b transposes the system to hexachords that would not only allow for the solmization of D♮ but would also restore the system to hexachords that correspond to the oscillatory nature of the bassus part--D♮/D^b:

H B^{b} C D E^{b} F G

N E^{b} F G A^{b} B^{b} C

S A^{b} B^{b} C D^{b} E^{b} F (G^{b})

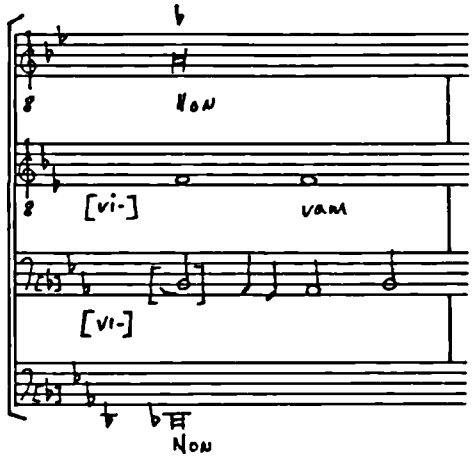
In addition to this, another reason for suggesting scribal error exists. When one assumes that the signature's E^{b} does not apply to the lower octave, then neither the signature nor chromatic signs within the bassus part specify the low E^{b}s which are so obviously necessary (see Ex. 3). That E^{b}s are required in places such as the one shown in this example is verified by 1540[7].

Ex. 3. Royal 8, m.6.

With the signature E^{b}, A^{b}, E^{b} the status of the flat sign placed before the D in m. 52 would change from one of apparent redundancy to one that initiates the oscillation of the mode to the implicit D^{b} (see Ex. 4).

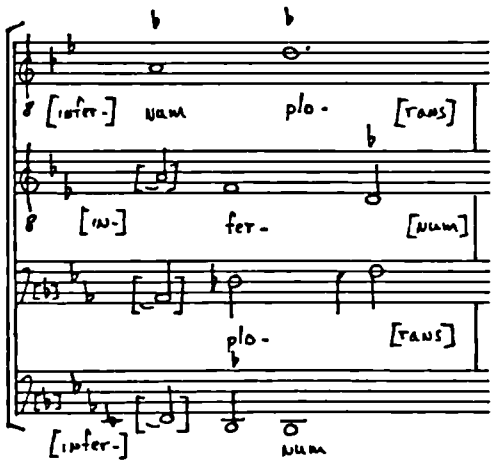
But it is on this issue of superfluous chromatic signs that problems occur. Without a D^{b} in the signature,

Ex. 4. Royal 8, m. 52



the question arises of whether the chromatic sign, once introduced in m. 52, should apply to all subsequent Ds in the bassus. This is certainly a possibility because stipulated D^{b}s in the tenor part at mm. 65 and 82 (the only places where Ds appear in the bassus after m. 52) demand the presence of flats in the other voices (see Ex. 5). Further complications materialise, however, when one examines chromatic signs in the other

Ex. 5. Royal 8, mm. 65/82.



parts to determine if they behave in a similar manner. The tenor, for example, contains a flat sign before each D that requires one, which demonstrates the localised nature of these signs.[23] It seems unlikely that the scribe would use flat signs in this way in the tenor part and in quite another way in the bassus.

Hence a confused picture surrounding the accuracy of this signature emerges. But even without a precise understanding of the signature, the pitch content of the bassus part can be ascertained. By using 1540^{7} as a point of reference the following can be stated with a fair degree of certainty:

1. All the Es of the lower octave should bear flats.
2. The D in m. 42 should remain a natural.
3. All Ds appearing after the introduction of the flat sign in m.52 should be interpreted as D^{b}s.

These clarifications do not require any emendations to the information contained in the bassus part of Royal 8 and reveal that the pitch content of the manuscript bassus is identical to that of 1540^{7}.

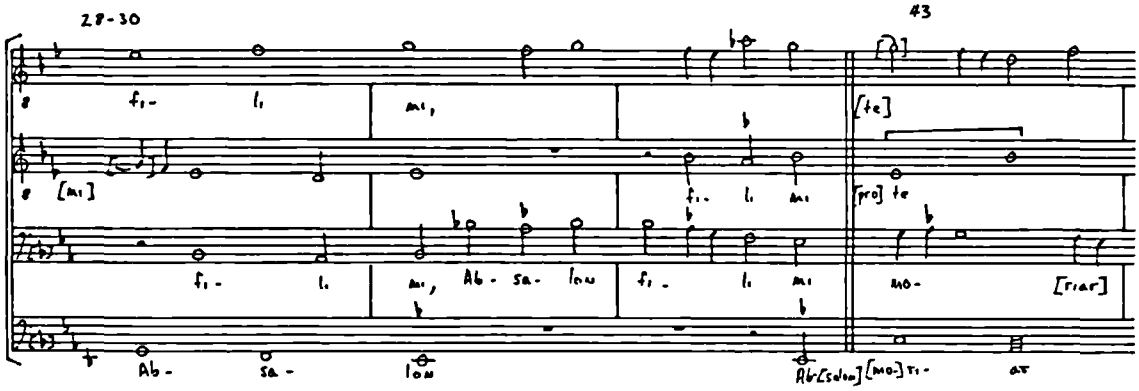
In contrast to the bassus, the pitch content of the tenor part is remarkably well-defined. All pitch change not specified by the signature, with two exceptions, is designated by chromatic signs. Those Ds needing flats have the appropriate signs placed before

them[24] and the upper octave of the signature's A^b is stipulated by a chromatic sign in at least one case, m. 34 (see Ex. 6). The As of mm. 29 (plus the A immediately

Ex. 6. Royal 8, m. 34.

following it in m. 30) and 43, however, lack the explicit indication of such a modification (see Ex. 7). But the A in m. 43 would normally have

Ex .7. Royal 8, mm. 28-30 and 43.

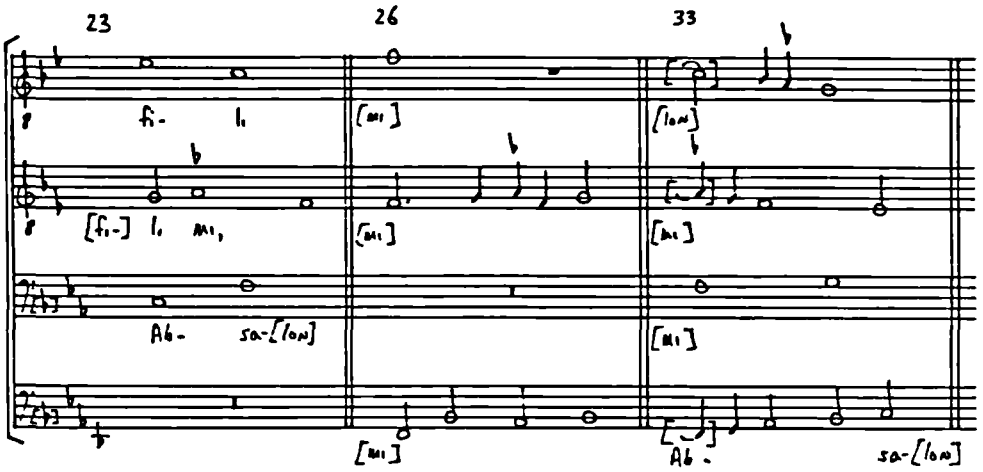


been sung as an A^b through the application of the fa supra la convention and our point of reference, 1540[7], corroborates this premise.

Similarly, internal evidence points to the interpretation of the A in m. 29 as an A^b. Both the previous A^b in the bassus, designated by the signature, and the following A^b in the discantus, specified by a chromatic sign, create a concentus in which the most likely solution to the ambiguity of the passage is the editorial addition of a flat. External evidence from 1540^7 substantiates this conclusion. With these adjustments to the tenor part, the pitch content now equals that of 1540^7.

If the pitch content of the contratenor and the discantus parts should also be equivalent to 1540^7, then a large number of pitch alterations must be made. Chromatic signs are specified in each part the first time an A^b or a D^b is required with the exception of the discantus D in m. 65.[25] No other signs are stipulated in either part. The question of whether or not these flats govern the remainder of the As and Ds in the parts is, like the bassus D^b in m.52, subject to debate. But A^bs and D^bs are called for in numerous places where no indications of these requirements appear (see, for instance, Ex. 8 below and Exs. 4, 5 and 7 above). For each of these examples, external evidence from 1540^7 supports the editorial pitch alteration. In fact, 1540^7 specifies B^bs and E^bs in all the places that A^bs and D^bs are absent in the contratenor and discantus of Royal 8 and if the pitch content of 1540^7 is transferred to Royal 8, the ambiguities of these two parts disappear.

Ex. 8. Royal 8, mm. 23, 26 and 33.



The surviving vocal sources are, then, identical in pitch content.[26] They represent divergent methods of transmitting the text and illustrate the varying degrees of complexity with which vocal music was notated. However, now that the essential structure of the pitch content is no longer troublesome, the details of interpreting chromatic signs either specified or editorially added must be examined.

Ochsenkun's intabulation of Absalon, fili mi furnishes a precise view of how a contemporary performer interpreted a vocal source. But in order to make a meaningful comparison between this intabulation and its model, we must determine the source from which Ochsenkun worked. The number and nature of the surviving vocal sources for Absalon limit the stemma to two branches: Royal 8 comprising one branch and $1540^{7}/1559^{2}$ the other. Of these, the 1559^{2} print appeared the year after

Ochsenkun's Tabulaturbuch was published and therefore can be immediately eliminated as the model. The British Library manuscript can also be dismissed as it would have been inaccessible to Ochsenkun during his entire life unless of course he travelled to England and came across the manuscript there.[27] But even if Ochsenkun never had the opportunity to see Royal 8 itself, the possibility can not be ruled out that sources identical to it may have circulated in northern Europe during the mid – sixteenth century. Additional grounds exist, however, for rejecting this version as the one employed by Ochsenkun.

The differences between Royal 8 and 1540^7 confirm the hypothesis that the Royal 8 version was probably unknown to Ochsenkun. Two melodic and two harmonic variants establish this premise. In mm. 24-25 of the discantus and in m. 45 of the contratenor, Ochsenkun follows the melodic structure of 1540^7 (see Ex. 9). The two harmonic variants involve pitches that are lowered in one vocal source but not the other. 1540^7 contains A^bs in mm. 53 and 70 of the contratenor and an $E^\natural$ in m. 51 of the tenor all of which are present in the intabulation (see Ex. 9).[28]

Ex.9. Variants in the sources.

Therefore, it can be stated confidently that Ochsenkun prepared his transcription either from a copy of this print or from a source very similar to it.

A number of discrepancies between Ochsenkun's arrangement and the 1540 print, however, suggest that another source almost identical to 1540[7] once existed. The following variants occur in passages that contain no ornamentation in the voices concerned:

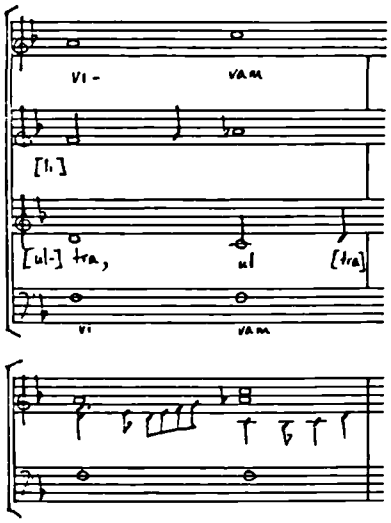
Ex. 10. Variants in Ochsenkun.

These variants are minor and although they might justify the belief in a lost source, their existence does not invalidate 1540[7] as Ochsenkun's model. The similarities between the intabulation and 1540[7], the geographic proximity of their origins, and the fact that the 1540[7] version remained current in Germany after the publication of Ochsenkun's Tabulaturbuch, establish the filial relationship between the sources.

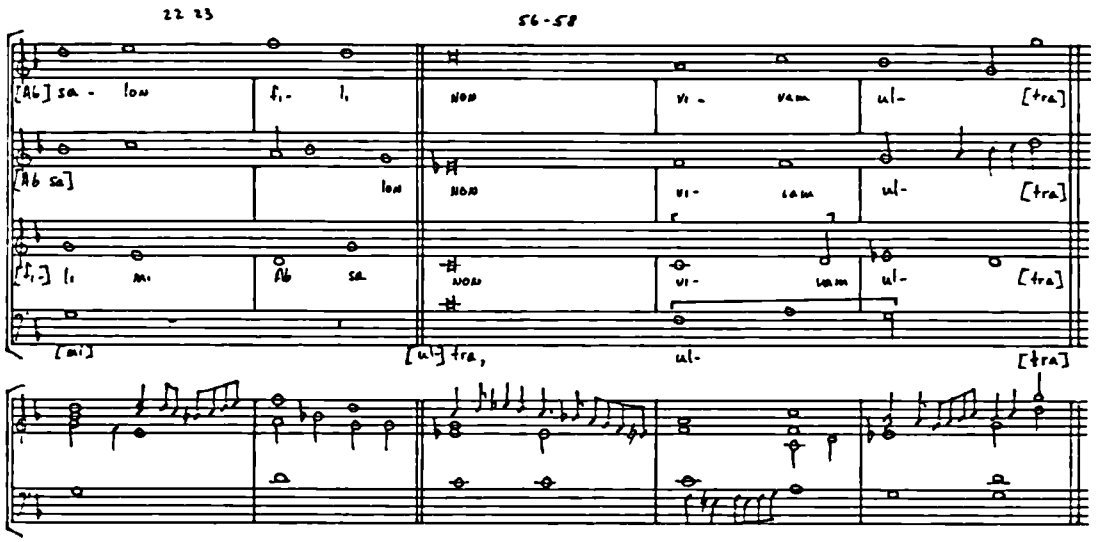
In transcribing Absalon, Ochsenkun incorporated all of the chromatic signs specified in his model, thereby furnishing a meticulous view of the localised nature of these signs. In fact, his intabulation provides further

documentation of how vocal lines following their own inner logic produce nonharmonic relations. Example 11 contains a striking situation in which the discantus employs an $A\flat$ that is immediately followed by an A^{b} in the contratenor. Each part proceeds unhampered by the other,[29] the resultant clash being retained by Ochsenkun. Occasionally, ornamentation becomes a vehicle for the creation of dissonant relationships where none occur naturally in the model (see Ex. 12). The decoration added to the discantus in m. 22 includes a $B\flat$ which conflicts with the following B^{b} in the contratenor, and in m. 56 the forward direction of the subsemitone to F appears to be more important than maintaining unity with either the preceding or the following E^{b}.

Ex. 11. 1540[7] and Ochsenkun, m. 53.



Ex. 12. 1540[7] and Ochsenkun, mm. 22-23 and 56-58.



A remarkable use of chromatic signs colours Ochsenkun's efforts to effect a smooth transition to m. 69 (where the repeat of mm. 52-68 begins) (see Ex. 13).

Ex. 13. 1540[7] and Ochsenkun, mm. 68-69.

He perceives the first half of m. 68 as belonging 'harmonically' to the preceding material and the second to that which follows. The ornamentation of the tenor's A-G includes the subsemitones for C (B♭) and G (F♯), but in the second half of the measure Ochsenkun prepares the way for the bassus' E^b through a decoration of the contratenor's leap from C to G which contains B^b, E^b and F♮.[30]

In addition to clarifying dissonant relationships which modern ears might be tempted to remove editorially, and demonstrating how these can be created through embellishment, Ochsenkun supplies details of modal procedure at cadence points. Cadential articulation is reinforced by the introduction of the subsemitone at all points where the subsemitone does not occur naturally (except of course Phrygian cadences) and, as we have seen, at other points where the undecorated model prohibits its employment.[31] All cadences on C, then, are approached by B♭ and those on G by F♯. Repeatedly, the strong subsemitone pull to the <u>epidiapente</u> proved particularly attractive to Ochsenkun, and the embellishment of the opening <u>fuga</u> exemplifies this aspect of his modal procedure. The frequent oscillation between <u>Bmi</u> and <u>Bfa</u> created by the introduction of this subsemitone in cadential and noncadential passages pervades the intabulation.[32] Thus, the performer can articulate the infrastructure of the work by employing devices that were the common property of all

the musicians of the period, and this shows that the final shaping of the music in both harmonic and melodic content was indeed in the hands of the performer, not the composer.

CONCLUSION

The preceding comparative study of the documents pertaining to the interpretation of pitch content in selected motets by Josquin Desprez has pointed to a number of significant conclusions.

Most importantly, it confirms that intabulations are indeed useful for determining sixteenth-century practices and that instrumentalists and singers worked within one and the same theoretical framework. Moreover, the thesis has provided evidence not of a single practice but of diverse practices that were dependent, to a large part, on the preference of the individual musician. It has documented the range of options open to the Renaissance performer and has demonstrated that a flexible attitude toward the interpretation of pitch content existed in the sixteenth century. In fact, dissonance, in the form of mi contra fa, nonharmonic relations and melodic tritones, was frequently produced by vocal lines following their own inner logic and was a characteristic feature of Josquin's motets.

The dissertation has exposed a number of lost vocal sources, and a more precise dating of the manuscript, Sev 1, has been proposed. Two performing traditions associated with the motet Inviolata have been disclosed, and the dissemination of one branch of the

stemma for *Pater noster* has now been documented beyond Italy and Spain. The confusion surrounding the pitch content and modal procedure of *Absalon, fili mi*, has been resolved, and the motet emerges as a modally coherent structure powerfully demonstrating the oscillatory tendencies of *cantus mollis* Lydian.

NOTES

Chapter I

1. See the discussion of terminology below.

2. See Ward Vihuela, pp.105-10; Brown Accidentals and Haar False, p.415.

3. See Bent Musica and Hughes.

4. See Allaire, pp. 26ff.

5. See Benthem and Noblitt Chromatic.

6. See Brown Accidentals and Brown Embellishment. Three other studies similarly restricted to one type of instrument are Apel Accidentien, which deals with keyboard tablatures, and Fox Accidentals and Honegger, which treat vihuela tablatures.

7. Praetorius SM III, 3, p. 31.

8. Le Roy Inst, f. 6^{r}.

9. The nature of this semitone depended on fret placement and while it was possible to increase or decrease the semitone's size by moving the fret up or down the neck of the instrument, one and the same

fret sometimes had to supply both fa and mi. For example, the vihuelist Luis Milán used the fourth fret to supply E^{b} and $B^{\flat}$ and the sixth fret to furnish F and $C^{\sharp}$ (cited in Lindley, pp. 61-62).

Chapter II

1. Le Roy Inst. f. 3^{v}.

2. Gerle MT. Tr. in Pierce, p. 151.

3. Gerle TL. Tr. in Pierce, p. 145.

4. Bermudo Dec, IV, 72, f. 100^{v}. Tr. in Stevenson, p. 57. Stevenson speculates that Bermudo may have been referring to the vihuelist Diego Pisador.

5. Le Roy Inst, f. 17^{r}.

6. Ibid., f. 51^{r}.

7. Bermudo Dec IV, 71, f. 99^{v}. See Stevenson, p. 57.

8. Gerle MT, f. c^{r}.

9. Ibid., f. c^{v}.

10. Bermudo Dec IV, 31, f. 82^{v}; Stevenson, p. 54.

11. Ibid. Compasete (tactus alla semibreve) is used for music employing the mensuration sign C and compas

largo (tactus alla breve) for the sign ¢ . Tomas de Sancta Maria, Arte de taner fantasia (Valladolid, 1565), defined tactus as "...the measure of time ... or ... the lapse of time between one downstroke [in beating the tactus] and the next one, but it must be observed that more than one downstroke is not effected in each tactus, on which stroke the tactus is begun, so that each time there is a downstroke, a new tactus is begun." (tr. in Jacobs Notation, p. 5). See Jacobs Notation, pp. 3-15 for a fuller discussion of these terms.

12. See, for example, the intabulations of Benedicta es in the second volume of this dissertation.

13. Tr. in Jacobs Fuenllana, p. xcvii.

14. See Jacobs Notation, pp. 3-15.

15. Bermudo Dec II, 35, f. 29^{v}; Stevenson, p. 43.

16. See Gerle MT. Tr. in Pierce, pp. 196 and 230.

17. Butler Fugue, p. 49.

18. English rhetoricians, such as Henry Peacham the Elder, described rhetorical ornaments as flowers (see The Garden of Eloquence, London, 1577, f. $A3^{r}$) and George Puttenham maintained that the application of

these figures lifted the language from "... the ordinarie habite and manner of our dayly talke and writing..." to that which was more lofty in style (see The Arte of English Poesie, London, 1589, p. 132).

19. Gerle TL. Tr. in Pierce, p. 144.

20. Bermudo Dec IV, 43, ff. 84^{v}-85. Tr. in Stevenson, p. 55.

21. Gerle MT. Tr. in Pierce, p. 178.

22. Other lutenists within the Josquin motet intabulations notate this proportion identically. See Benedicta es, tertia pars; In exitu Israel de Aegypto, tertia pars mm. 15-30, 38-67, 74-79 and 93-98; Memor esto, secunda pars mm. 64-75, 100-03 and 109-14; Praeter rerum seriem, secunda pars mm. 53-88 and Qui habitat, secunda pars mm. 1-25.

23. Gerle, whose methodology is identical to that of Le Roy, first produced intabulations in the early 1530s. See the bibliography for full citations of these volumes.

24. R. Dowland Var, p. 12/Besard TH, f. $Xx4^{r}$.

25. Vaccaro, pp. 112-17.

26. Ibid., p. 114, Fig. 10.

27. Ibid., p. 115, Plate 9 and pp. 116-17.

28. Ibid., p. 76, Fig. 1, last system.

29. See the bibliography for full citations.

30. The ensuing pages contain editions of the four chansons derived from the instructions. The symbols placed above those notes carrying chromatic signs indicate what the original pitches of these notes were in the chanson collections. The sources consulted for this study are:

Quand mon mary (Lasso). Sesieme livre de chansons à quatre & cinq parties. Paris: Le Roy and Ballard, 1573^{11} edition.

Si le bien au plus grand bien (Arcadelt). Quatorsieme livre de chansons à quatre & cinq parties. Paris: Le Roy and Ballard, 1564^{10} and 1571^{1} editions.

Je l'ayme bien (Lasso). Dousieme livre de chansons a quatre & cinq parties. Paris: Le Roy and Ballard, 1559^{12}, 1569^{15} and 1572^{4} editions.

Un doux nennin (Lasso). Quinzieme livre de chanson à quatre & cinq & six parties. Paris: Le Roy and Ballard, 1571^{2} edition.

31. No apparent reason for the inclusion of the sharp sign in the third case (m. 43 of Je l'ayme bien) has been found.

32. See Chapter V for a discussion of this matter.

33. See Quand mon mary, mm. 19, 36, 42, 44 and 45; Si le bien, mm. 11, 100 and 110; Je l'ayme bien, mm. 10, 29, 52 and 67; and Un doux nennin, mm. 51, 69, 76 and 97.

34. See Sandberger, Vol. 1, No. 11, m. 20.

35. See Seay Arcadelt, Vol. 9, No. 100, m. 5.

36. See Sandberger, Vol. 1, No. 21, m. 15.

37. Glarean Dod I, 8. Tr. in Miller Glarean, Vol. 1, p. 60.

38. For a discussion of this convention, see Chapter IV of this dissertation.

39. Neither of the unspecified flats are included in the collected works. See Seay Arcadelt, Vol. 9, No. 100, mm. 18 and 35.

Chapter III

1. See, for example, the articles in Part IV of Fenlon MMEME (particularly the bibliography appended to Boorman) and Noblitt Textual.

2. The variants for the five motets are listed in Appendix I. Unfortunately, the lack of significant variants in Praeter rerum seriem prevents the identification of the vocal model in all cases and as a result, no discussion of this motet will be included in this chapter. The standard versions used for compiling the tables of variants are those in the collected works.

3. The significant variants in Pater noster are:

	prima pars	secunda pars
superius	mm. 83, 104	mm. 39-42, 61, 74
altus	mm. 48-49	mm. 19, 62
quinta vox	mm. 17-21, 24-25, 70-71,104, 112-13	mm. 4, 16-22, 30-46, 48, 51, 54, 57
tenor	mm. 45-46	-
sexta vox	-	-
bassus	mm. 17-21, 26-27, 33, 36	-

4. The fact that the E^b in m. 58 (prima pars) was not observed by Gintzler has been discounted. In

this passage, Gintzler altered the previous note to B♮, thereby making the E♭ melodically unacceptable. His avoidance of the tritone reveals his conservative approach to these matters, especially in comparison to Francesco da Milano's interpretation of the same passage:

5. These variants in the quinta vox also eliminate from consideration those Spanish sources which, like the Valderravano tablature, contain only the secunda pars of the motet, that is, Sar 17, Sev 1 and Val 5.

6. Ochsenkun spent a number of years in the service of Count Palatine Ottheinrich at Neuburg and at Heidelberg. See The New Grove 13, p. 488.

7. The signature in the tenor primus does not actually vanish until m. 44, but since the pitch 'B' does not occur in this voice between mm. 39 and 44, it effectively stops at m. 39.

8. See mm. 40, 46, 48, 52 and 53.

9. Gerle omits the B in mm. 57 and 59 but for its other two appearances, mm. 44 and 46, he retains the signature's flat.

10. The significant variants in Inviolata are:

	prima pars	secunda pars	tertia pars
superius	mm. 15, 35-36, 54-55	mm. 41-42	mm. 27-28, 36-37
altus	mm. 31, 34, 44, 57, 59	mm. 16, 19	mm. 20, 21-22, 34
tenor primus/	-	-	-
secundus	-	-	-
bassus	-	mm. 12, 27	-

11. The significant variants in Stabat Mater are:

	prima pars	secunda pars
superius	mm. 4, 13, 24, 62	mm. 18, 73, 77, 81, 83, 84
altus	mm. 29, 49	mm. 10, 72, 73, 75, 84
tenor	-	-
superius secunda vox	-	mm. 73, 74, 79, 83, 86, 87
bassus	m. 49	mm. 73, 77, 79, 85

12. The significant variants in Benedicta es are:

	prima pars	secunda pars	tertia pars
superius	-	mm. 4, 7, 14, 27	-
quinta vox	-	-	-
altus	-	mm. 3, 14, 21	-
tenor	m. 66	-	-
bassus	mm. 41, 80	-	-
sexta vox	m. 6	-	-

13. Snow, p.24

14. Juan Bermudo, in 1555, states that Fuenllana was in the service of the Marquesa of Tarifa: "... a Fuenllana musico de la senora marquesa de taripha, ..." (Bermudo Dec II, 35, f. 29^{v}). See Jacobs Fuenllana, pp. xix-xx for a discussion of the sparse details concerning Fuenllana's career.

Chapter IV

1. See, for example, IV, 48, f. 88^{r}: "... vieniendo a unisonos no la haremos cantando, o tanendo." and V, 32, f. 138^{v}: "Pues como lo que ahora se tane, y canta en composicion ..."

2. I, 11, f. 27^{v}: "... y lo que es incantable no se puede taner." (Tr. in Jacobs Ficta, p. 285).

3. Vanneus RMA III, 36, f. 90^{r}. Tr. in Lowinsky Musica Nova, p. viii.

4. Tinctoris NPT 8. Tr. in Seay Tinctoris 1, p. 12.

5. Aaron Tosc A. Tr. in Bergquist, Vol. 3, pp. 16-17.

6. Ibid., p. 20.

7. See Bermudo Dec III, 24, f. 43^{v} and Vicentino AM IV, 21, f. 82^{r}.

8. Praetorius SM III, 3, p. 31. Tr. in Lockwood Sample, p. 168.

9. Ornithoparchus/Dowland MAM I, 5, p. 16.

10. Tinctoris NPT 8. Tr. in Seay Tinctoris 1, p. 12.

11. Gerle MT. Tr. in Pierce, p. 229.

12. Ornithoparchus/Dowland MAM IV, 5, p. 84.

13. Zarlino IH III, 53-54. Tr. in Marco and Palisca, pp. 141-53.

14. The rhetorical connotations of cadence placement await elucidation.

15. This information has been taken from Aaron Tosc, Dressler PMP, Pontio RM and Sancta Maria ATF.

16. Zarlino IH III, 53. Tr. in Marco and Palisca, pp. 144-45. Vanneus concurred. See the quote given above, p. 76 .

17. Ugolino DMD 34. Tr. in Hughes, pp. 31 and 33.

18. Bermudo Dec IV, 48, f. 87^{v}. Tr. in Jacobs Ficta, p. 280. Gaffurius (PM III, 3) states: "... when we approach a perfect consonance from an imperfect consonance, as at a final cadence or any other cadence, it is necessary to progress to the perfect interval by contrary motion of the closest imperfect consonance." (Tr. in Miller Gaffurius, p. 128), and Ornithoparchus/Dowland (MAM IV, 3, p. 80) comments: "Let alwaies the next perfect follow the imperfect

Concords, as a Unison after an imperfect third; a fift after a perfect; a fift after an imperfect sixt; an eight after a perfect, as Gafforus lib. 3. cap.3 declareth."

According to Bermudo, the subsemitone was even incorporated on instruments where its production was exceedingly difficult: "it is said that the celebrated Ludovico [a harpist] when he came to a cadence pinched the string, thus raising its pitch by a semitone and obtaining the needed sharp for the cadence; but enormous skill and practice are necessary to do this." (Bermudo Dec IV, 88, f. 110^{v}. Tr. in Stevenson, p. 59).

19. Bermudo Dec IV, 48, f. 88^{v}. Tr. in Jacobs Ficta, p. 281.

20. Praetorius SM III, 3, p. 31.

21. Sancta Maria ATF I, 24, f. 63^{v}.

22. Ibid., ff. 67^{v}-69^{v}.

23. Ibid., I, 10, f. 25^{r}. Tr. in Jacobs Ficta, p. 279.

24. Aaron Tosc A. Tr. in Bergquist, Vol.3, p. 15. In similar melodic lines, the lutenists, Melchiore de Barberiis, Diego Pisador and Sebastian Ochsenkun,

incorporated both B^{b} and $F^{\#}$. See Salve regina, 69-70 & 78-79 and Qui habitat, II 121-22.

25. Tinctoris AC II, 34. Tr. in Seay Tinctoris 2, p. 131.

26. Bermudo Dec V, 32, ff. 138^{v}-39^{r}. Tr. in Jacobs Ficta, p. 283.

27. Tovar LMP III, 6. Cited in Stevenson, p. 34.

28. Finck PM. Tr. in Kirby, p. 101.

29. Bermudo Dec. V, 32, f. 139^{r}. Tr. in Jacobs Ficta, p. 283.

30. It should be noted that the intabulations of Josquin's motets do not substantiate these claims.

31. Aaron Tosc II, 20. Tr. in Bergquist, pp. 33-34.

32. Ibid.

33. Bermudo Dec V, 20, f. 131^{r}. Tr. in Jacobs Ficta, p. 283.

34. Sancta Maria ATF I, 26, f. 90^{r}. Tr. in Jacobs Ficta, p. 280.

35. Gaffurius PM III, 13. Tr. in Miller Gaffurius, p. 146.

36. See CS III, p. 73. Cochlaeus (TM II, 10. Tr. in Miller Cochlaeus, p. 46) discusses clausulae where re ut re and sol fa sol are sung with a subsemitone, and Vanneus (RMA III, 36, f. 90^{r}) concurs.

37. Zarlino IH III, 24. Tr. in Marco and Palisca, p. 47.

38. Ibid., III, 30. Tr. in Marco and Palisca, pp. 67-68.

39. Tinctoris AC II, 33. Tr. in Seay Tinctoris 2, p. 130.

40. Ibid.

41. Ornithoparchus/Dowland MAM IV, 4, pp. 80-81.

42. Ibid.

43. Bermudo Dec V, 32, f. 139^{r}: "y como los cantores tengan hecho el oydo, oyendo lo en una boz: lo usan en composicion, ..." (Tr. in Jacobs Ficta, p. 284).

44. This and all those examples from Bermudo given below are found in the Dec V, 32 (Tr. in Jacobs Ficta, pp. 281 and 283-85).

45. In Ex. 15, the tenor's B♭ leaps to the E and the altus provides the C.

46. Aaron Tosc II, 17. Tr. in Bergquist Vol. 2, p. 29. Sancta Maria concurs. See Sancta Maria ATF I, 11, ff. 27^{r}-28^{v}. Tr. in Jacobs Ficta, pp. 285-86.

47. Coclico CM. Tr. in Seay Coclico, p. 22.

48. Bermudo Dec V, 32, f. 140^{r}. Tr. in Jacobs Ficta, p. 281.

49. Correa FO, Advertencia 17. See Kastner MME 6, pp. 49-50.

50. Correa FO, f. 81^{v}. Tr. in Jacobs Correa, p. 19, n. 84. The tense of the verbs has been changed in order to achieve uniformity in this sentence.

51. Cabezon, f. 142^{r}. Trans. in Jacobs Ficta, p. 291, Ex. 5.

52. Montanos AM V ff. 21^{v}-23^{r}. Trans. in Jacobs Ficta, pp. 294-95, Ex. 18.

53. See Apel Punto.

54. Ibid., p. 178.

55. Zarlino IH III, 31. Tr. in Marco and Palisca, pp. 65-66

56. Ibid., p. 69.

57. The E^b in the secundus bassus is notated in a number of sources but no source specifies a flat for the altus E in m. 67 (see Appendix). Furthermore, each of the three intabulators maintains the nonharmonic relations (see Vol. II). See Benthem for futher examples of these relations in Josquin's works.

58. Agricola MCD 8. Tr. in Howlett, p. 118.

59. Ornithoparchus/Dowland MAM I, 10, p. 25.

60. Ibid., I, 7, p. 20.

61. Zarlino IH III, 57. Tr. in Marco and Palisca, pp. 174-75.

62. Aaron Tosc A. Tr. in Berquist, Vol. 3, p. 12.

63. Ibid., pp. 14-15.

64. Zarlino IH III, 57. Tr. in Marco and Palisca, p. 173.

65. Praetorius SM III, 3, p. 31.

66. Tinctoris NPT 8. Tr. in Seay Tinctoris 1, p. 13. He maintained that while it was possible for a singer to use a tritone in a stepwise progression, the tritone leap was either difficult or impossible.

67. Bermudo Dec V, 32, f. 139^{r}. Tr. in Jacobs Ficta, p. 284.

68. Sancta Maria ATF I, 11. Tr. in Jacobs Ficta, pp. 285-86.

69. Glarean Dod I, 8. Tr. in Miller Glarean, Vol.1, p. 60.

70. Praetorius SM III, 3, p. 31.

71. Ornithoparchus/Dowland MAM I, 5, p. 15.

72. Coclico CM. Tr. in Seay Coclico, p. 11.

73. Praetorius SM III, 3, p. 32.

74. Agricola MCD 4. Tr. in Howlett, p. 87: "But when a song ascends only a second above la and soon falls back to F fa ut, then one always sings fa on these notes [a second above la], unless one of these signs ♭ ♯ which signify mi should be found beside them, particularly in figural song." Guilliaud RMP 5. Tr. in Allaire, p. 45: "Whenever a note exceeds the six degree-syllables by a second, this seventh note

must be called fa without making mutation into the next hexachord. This note must be sung flat (mollement) even in the absence of any flat sign (b) before or above it, unless the natural sign (♮), were to affect it."

75. Ornithoparchus/Dowland MAM I, 5, p. 15.

76. Aaron LM I, 8.

Chapter V

1. See Lockwood Dispute.

2. Ness Francesco, p. 3.

3. The New Grove 11, p. 818.

4. Ward Vihuela, pp. 381-82.

5. Prizer Lutenists. See Amos for biographies of twenty-nine other such lutenists active in Germany during the sixteenth century.

6. Sancta Maria ATF I, 21, f. 57^{v}: "... es cantar cada boz por si, entendiẽdola solfa de rayz."

7. Pisador LM, ff. 17^{r}-24^{r}.

8. Milán EM, Fuenllana OL, Sancta Maria ATF, Virdung MG and Judenkünig ASKU.

9. Board Lute Book, f. 1^{v}. Robert Spencer believes that the chart may be in the hand of John Dowland (see the unpaginated commentary in his facs. ed. of the Board Lute Book).

10. Milán EM, preface; Fuenllana OL, preface; and Adrianssen NPM, preface.

11. Milán EM, ff. $B1^{v}$-$G2^{r}$ and $J1^{r}$-$P5^{r}$; and Fuenllana OL, ff. 170^{r}-172^{v}.

12. The theorist Pietro Aaron even saw fit to consult the Italian lutenist Marco Dall'Aquila (c. 1480-after 1538) on a question of music theory. See The New Grove 5, p. 162.

13. See Chapter II of this dissertation for a discussion of these matters.

14. See Chapter IV of this dissertation for a discussion of dissonant octaves.

15. See Chapter II of this dissertation.

16. See Brown Instrumental for a listing of the printed books containing pieces for voice(s) and lute.

17. Compare Ex. 1 above with Ex. 3 in Chapter IV.

18. That is, primary cadences on D (Praeter rerum, I 48 & 50; Tribulatio et angustia, 15, 22 & 55) and secondary cadences on A (Ave Maria, 58; Qui habitat, I 73, II 40; Tribulatio et angustia, 20, 36 & 41) in cantus mollis Dorian.

19. See Chapter IV, note 36.

20. Tinctoris AC II, 34. Tr. in Seay Tinctoris 2, p. 131. The underlining is mine.

21. Interestingly, the passage in Benedicta es is repeated in mm. 8-9, 11-12 and 19-20. Miguel de Fuenllana, however, does not treat these sections consistently --he interprets the passage chromatically on only three of its appearances.

22. See Benedicta es, I 4-5, 8-9, 11-12 & 19-20; Memor esto, I 63-64 and Salve regina, 9, 14-15, 21-22 & 37-38.

23. Further examples of this practice occur in Praeter rerum, I 51-52; Qui habitat, II 69-70 & 73-74 and Tribulatio et angustia, 20-21.

24. See Chapter IV of this dissertation for a discussion of these statements.

25. Ibid.

26. Ibid.

27. See Chapter IV of this dissertation for a discussion of this dilemma.

28. Zarlino IH III, 31. Tr. in Marco and Palisca, p. 69.

29. Bermudo Dec V, 32, f. 139^{r}. Tr. in Jacobs Ficta, p. 284.

30. See Chapter IV of this dissertation for a discussion of Zarlino's prohibition of these relations.

31. See Chapter IV of this dissertation.

32. On the difference between fuga and imitazione in the sixteenth century, see Haar Zarlino. I use the term fuga to designate the literal repetition of the solmization syllables of the thema by the other voices (see Sancta Maria ATF II, 33, f. 64^{r}) and the term imitazione to refer to a structure in which this repetition is not exact. The rhetorical connotations of Renaissance fugae are discussed in Butler Fugue, pp. 49-62.

Chapter VI

1. Throughout this chapter the vocal sources will be referred to as Royal 8, 1540^7 and 1559^2.

2. This was made possible by clearly indicating textual repetition and by spreading the notes of each part over a greater number of staves hence allowing more room to place the text under the appropriate notes.

3. Since 1540^7 and 1559^2 are identical in pitch content, comparisons between the sources will be confined to Royal 8, 1540^7 and the Ochsenkun intabulation.

4. Reasons for the low pitch of Royal 8 have been suggested by Edward E. Lowinsky; this matter is not of central concern to this study. See Lowinsky Ascanio.

5. See Apel Partial; Apel Postcript; Lowinsky Function; Hoppin Partial; Lowinsky Conflicting; Hoppin Conflicting; Bent Musica; Hughes; and McGary. For a brief summary of the main views, see The New Grove 12, p. 805.

6. See mm. 10-16, 60-65 and 77-82. Short examples will be included within the main body of the text. Please refer to Vol. II for the lengthier passages.

7. For a discussion of signatures and their implications for hexachords, see Bent Musica and Hughes, pp. 46ff.

8. That E^b was regularly included in pieces in cantus mollis Lydian by at least the 1530s can be gleaned from vihuela instruction-books which designate the mode of each piece. See, for example, Fantasia 19 and Pavana 3 in Luis Milán's El Maestro, ed. Jacobs Milán, pp. 82-87 and 104-05.

9. Hypotyposis is the generic term used by musica poetica theorists to designate musical devices that function to illustrate words and ideas in a text. For the definition of this and other musical-rhetorical figures and for a more general introduction to the influence of rhetorical thought on music see Buelow; Palisca; and Unger.

10. Normal mid sixteenth-century procedure includes the employment of subsemitones at all cadence points and the use of E^b to correct mi contra fa. In practice, these two factors cause an increase in the number of oscillatory areas within the mode. This increase results in frequent mi-fa clashes between $E\flat/E^b$, $B\flat/B^b$ and if the transitory cadence-note G is present, $F\#/F\flat$. For unmistakable examples of these procedures, see the following mode V and VI

pieces in vihuela tablatures: Milán, El Maestro, Fantasia 19, ed. Jacobs Milán, pp. 82-87 and Fuenllana, Orphenica lyra, Fantasias 33-36 and Tiento in Tone VI, ed. Jacobs Fuenllana, pp. 526-40 and 983-84.

11. For an analysis of the latter parts of these sections in modern tonal terms, see Novack. However, since the necessary terminology and techniques for analysing sixteenth-century music were developed by the early 1600s, this author believes that contemporary and near contemporary tools yield a more accurate understanding of compositional processes.

12. Joachim Burmeister, in his Musica poetica (Rostock, 1606), p. 65, defined this term as imitation not carried through all the voices, that is, partial fuga. The term anaphora is used to identify the structural property of this section and that of mm. 46-53 because in these sections Josquin maintains the same voice-pairing as in the fugae--the principal difference between the two structures being that in the anaphorae only two voices take part in the mimetic texture.

13. See mm. 52-60.

14. See mm. 60-68.

15. Johannes Nucius in his Musices poeticae (Neisse, 1613), f. A4^{r} identified Josquin as one of the new rhetorically expressive composers. Burmeister (Musica poetica, pp. 63-64) defines climax as the repetition of a melodic fragment at a different pitch. A discussion of Burmeister's figures and their application to Lasso's motet In me transierunt appears in Palisca.

16. In rhetoric, climax is a ladder form in which a repeated word links the preceding step to the following. See Sonnino, pp. 101-02. Josquin, too, links his steps as the last note of one fragment becomes the first of the next. See, for example, mm. 61-65 of the bassus.

17. The term modulation has been used to describe this and other similar procedures. See Lowinsky Re-examined, where Professor Lowinsky reviews his theories on modulatory techniques in sixteenth-century music. But the anachronistic discussion of Renaissance music can be misleading. See Benthem, in which Benthem discusses Lowinsky's theories on Josquin's Fortuna dun gran tempo and presents a fresh view of this piece. However, three more contemporary interpretations of pitch content in Fortuna exist that are yet again different from the Spinacino intabulation examined by both Benthem and

Lowinsky. See Berlin, Staatsbibliothek, MS 40026 (Leonhard Kleber tablature), ff. 20-21, ed. Warburton, pp. 95- 96; and Basel, Universitätsbibliothek, MS F.VI.26(C) (Fundamentum for Oswald Holzach), ff. 7^{v}-8^{v} and MS F.IX.22 (Johannes Kotter tablature), ff. 18-19^{v}, ed Marx, pp. 95-96 and 16-17.

18. The author presumes that the tenor and bassus signatures imply the inclusion of B^{b}.

19. See, for example, Royal 8, ff. 2^{v}, 6^{v}, 23^{v}, 49 and 54^{v}.

20. As does the Ochsenkun intabulation.

21. The singer is forced outside the system in other subsemitone cadences as well. See mm. 20, 55 and 72 where A♭s are required. The whole issue of mutation outside the system at subsemitone cadences may be a moot point because it may have been normal practice to supply subsemitones without mutation to the proper hexachord. See Chapter IV of this dissertation, note 36.

22. Hexachords built on these notes were discussed by John Hothby (c. 1410-87) in his Calliopea legale. See Seay Hothby.

23. See Smijers Werken, Supplement, pp. 22-25, mm. 51, 58, 65, 75, and 82. On the limited jurisdiction of chromatic signs, see Chapter IV of this dissertation.

24. See note 23.

25. Curiously, an erasure occurs before this note of what might have been a flat sign. A similar erasure is found before the contratenor D in m. 82 and if the scribe originally inserted flats in these places, the deletions may indicate the difficulty the scribe had in determining which flat signs were essential. But even without a stipulated flat in m. 65, the performer probably would have sung a D^{b} as this note is approached by leap from an $A^{(b)}$.

26. The question of recension lies outside the scope of this dissertation, but one aspect of the problem deserves comment. Internal evidence within 1540^{7} points to the possiblity that in this version the text is presented with a greater understanding of its content. The anaphora of mm. 16-26 in which the bassus is paired with the discantus in a partial fuga confirms this hypothesis. Only in the printed version is the fugal connection between the two voices fully realised, and for this reason 1540^{7} may represent a more accurate reading of the text.

27. See the Census-Catalogue, Vol. 2, pp. 103-04 for a listing of the most important literature pertaining to this manuscript and for a summary of the views on its dating and provenance; also see Benfield.

28. He also employs the rhythmic variants of the printed version in m. 15 of the contratenor and m. 41 of the bassus, but in both these cases longer notes are divided into shorter values--a practice commonly employed by Ochsenkun and other lutenists when intabulating semibreves. See mm. 1, 4, 6, 8, etc., in the Absalon intabulation and the statement by Adrian Le Roy in his A Briefe and plaine Instruction, f. 4: "But in the other two instruments [lutes and virginals] their sound, which dependeth altogither by the toutch of the fingers, cannot endure longer than a semibreve...which is the reason in consequence, that forceth us when we set in Tablature, to divide Maxims alwayes in eight partes, Longes in foure, Breves in two, and so forth of other great notes which are augmented with pricks."

29. See pp. 160-61 for a discussion of the solmization of this passage.

30. Further examples of nonharmonic relations occur in mm. 41-42 and in m. 51.

31. See, for instance, Ex. 12, m. 56. At times, the subsemitone is included in an anticipatory ornamental figure that causes momentary direct dissonance with a lower voice. See mm. 25 and 33.

32. Bmi is found in the following measures: 2-3, 11, 19-20, 22, 35, 37-38, 41, 55, 59-60, 67-68, 72, 76-77 and 84.

APPENDIX

VARIANTS IN THE MOTETS

BENEDICTA ES

INVIOLATA

PATER NOSTER

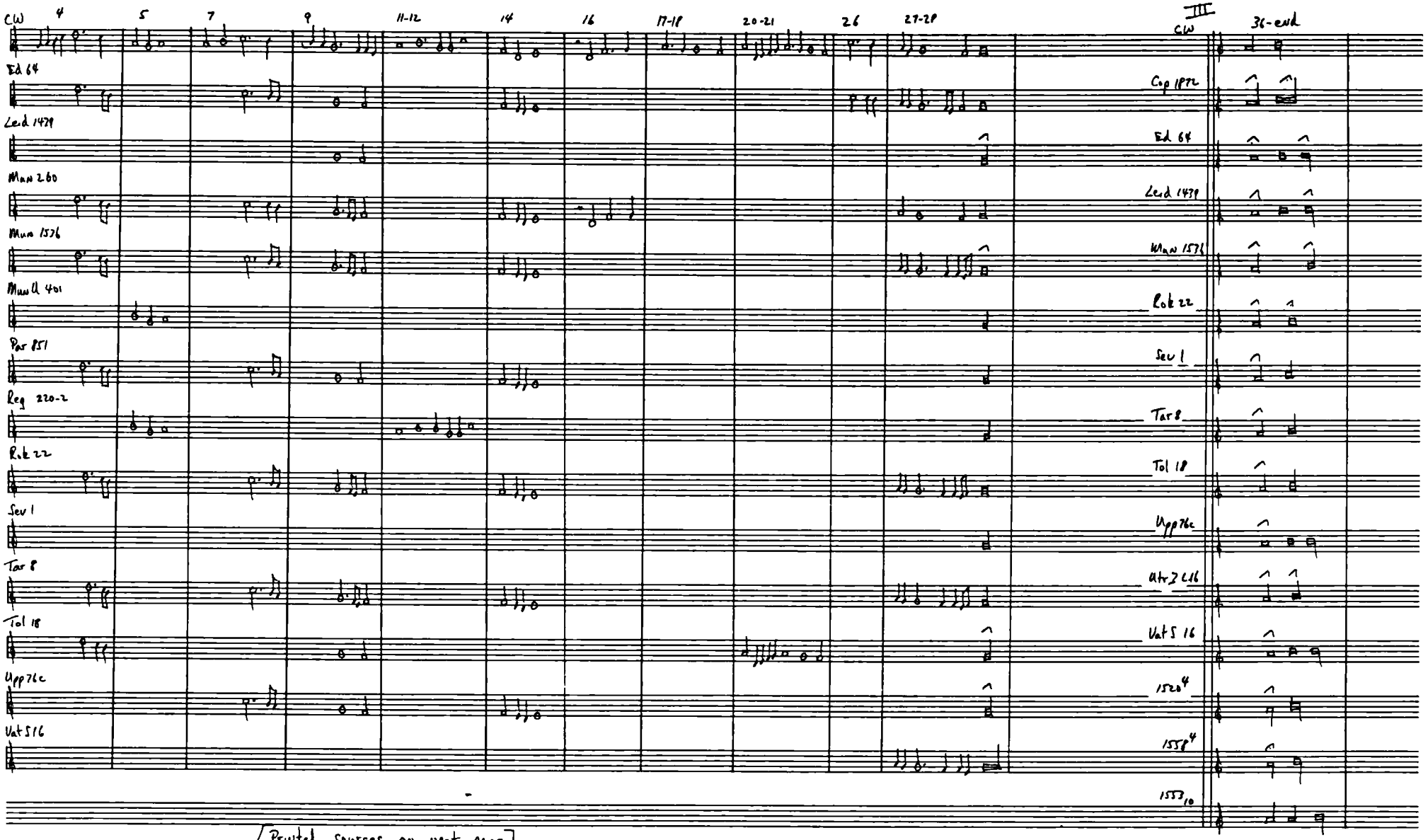
PRAETER RERUM

STABAT MATER

MELODIC VARIANTS

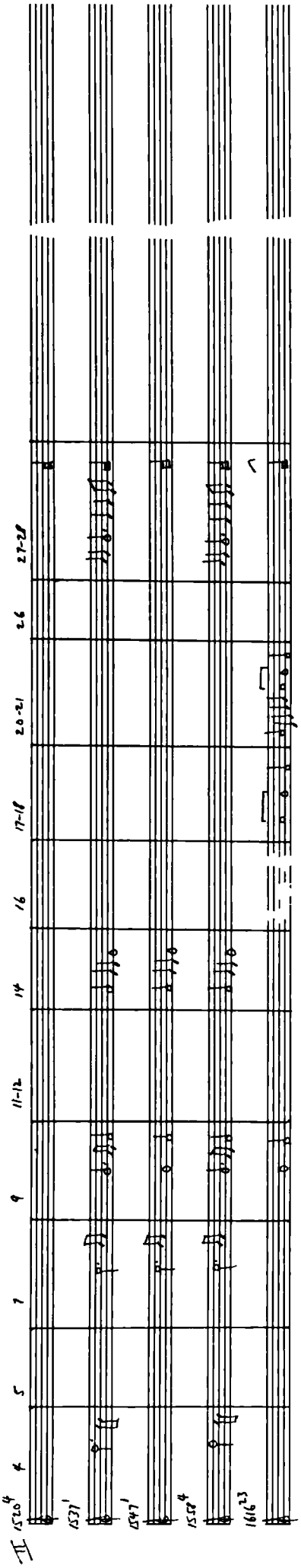
No variants in Cop 1872, Mun 401, Sev 1, Vat S 16 and 1520⁸.

* CW = Collected Works [Werken van Josquin des Prez, ed A Smijers, M Antonowycz and W Elders (Amsterdam, 1921-69)]



[Printed sources on next page]

No variants in MunU 401, Par 851, 1537¹.



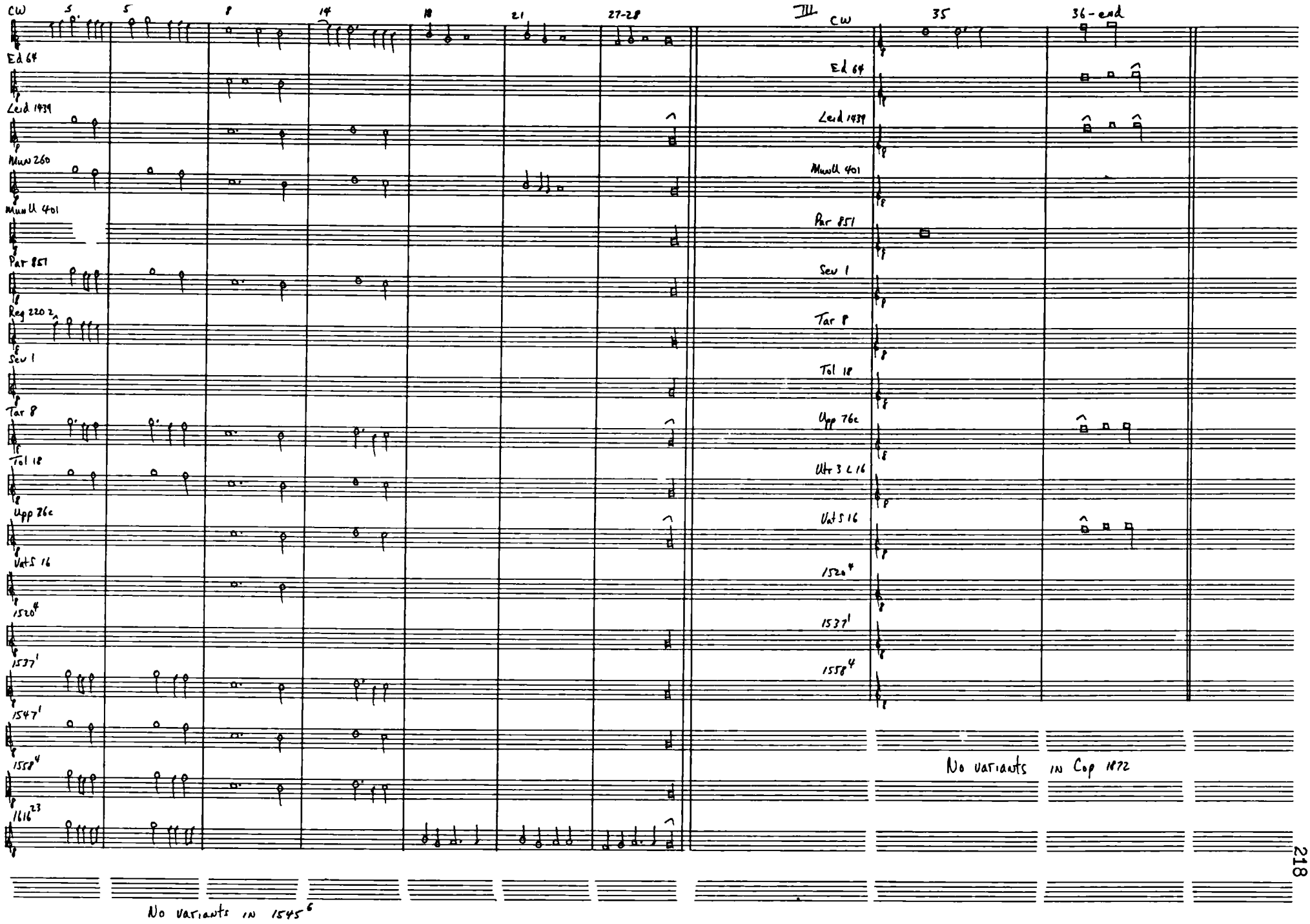
No variants in 1545 6

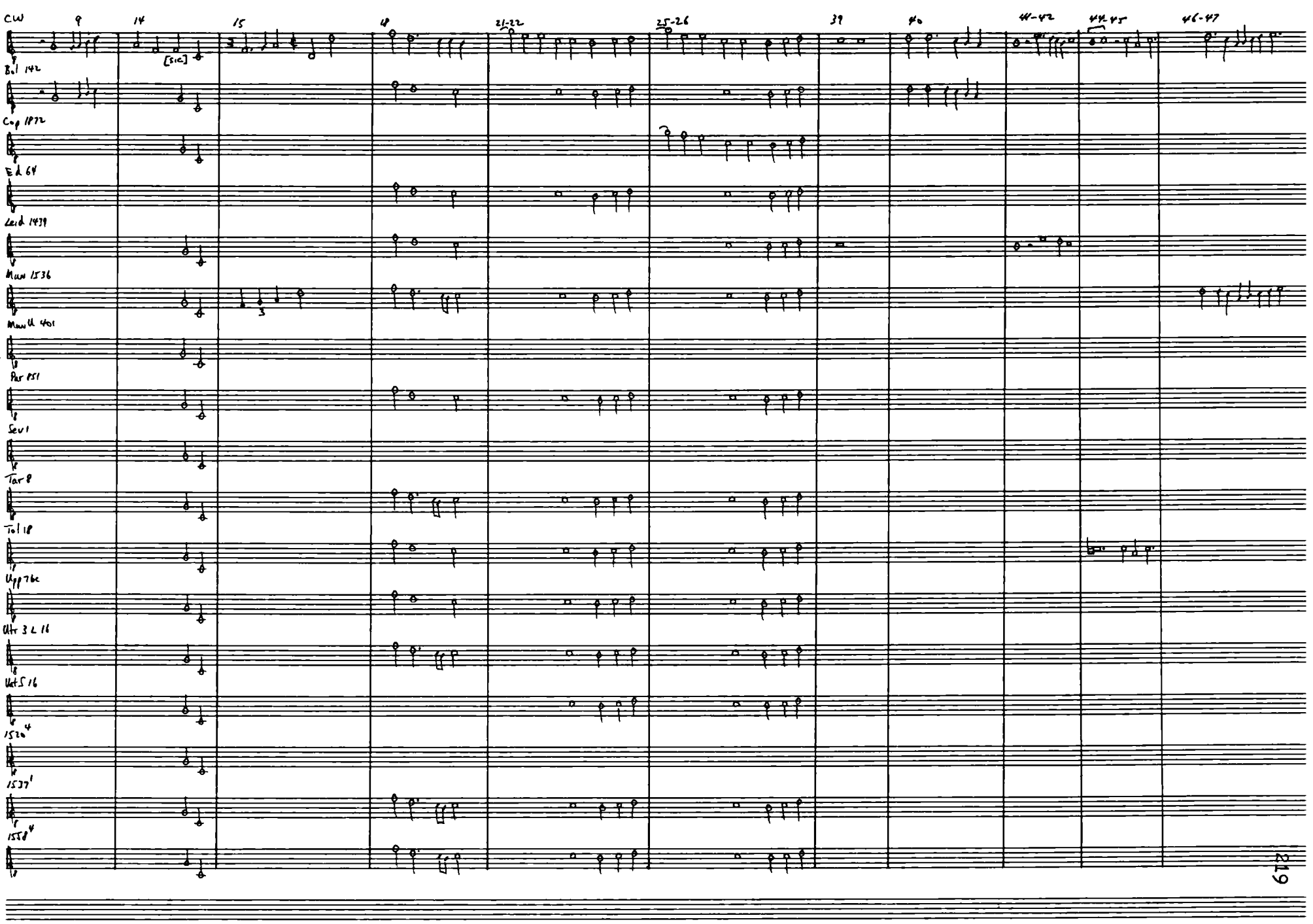
Benedicta es - Superius (continued

Benedicta es - Athus

No variants in Munlk401, Sev 1, 1520[4].

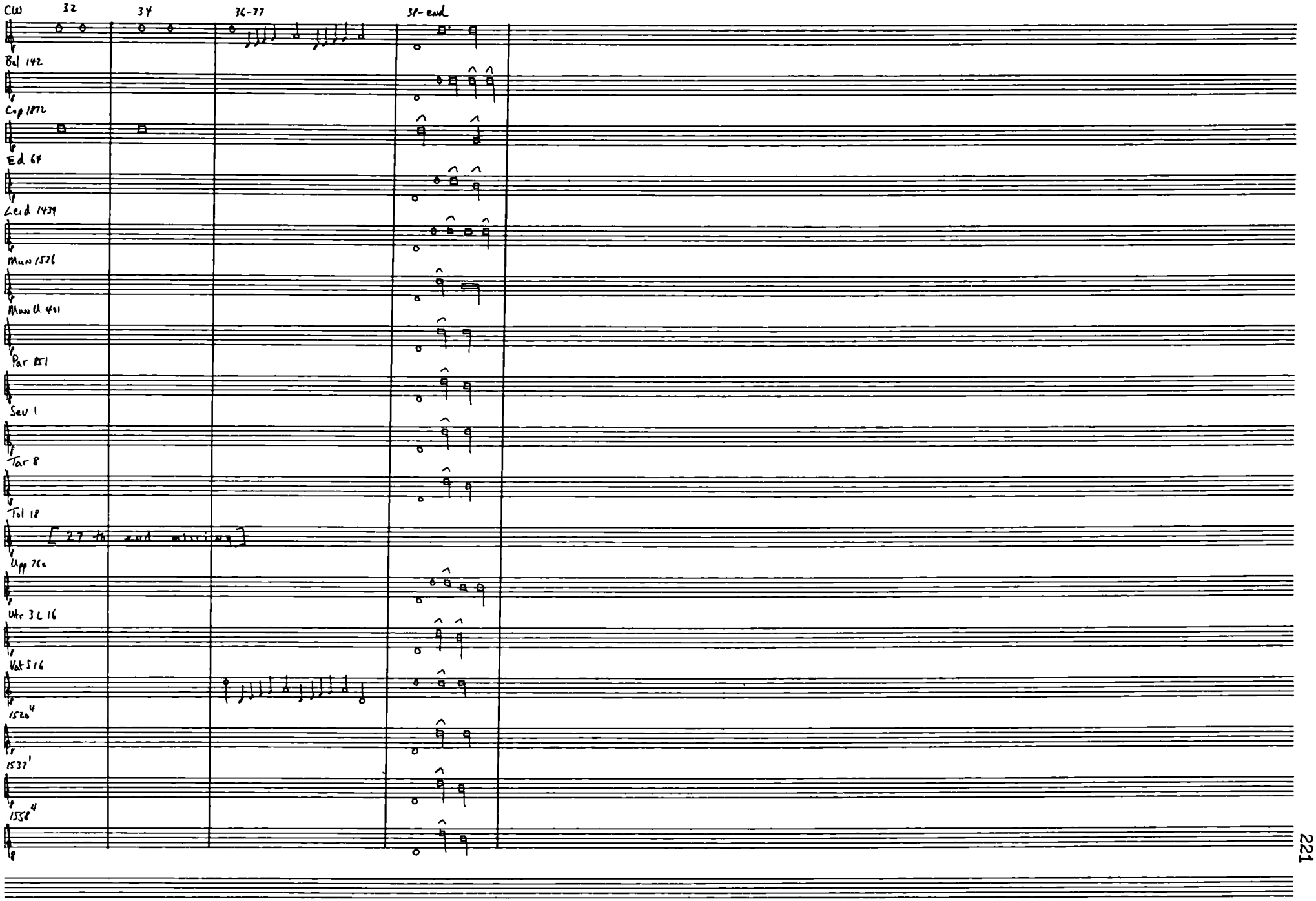
* Lacking mm 71-72 5

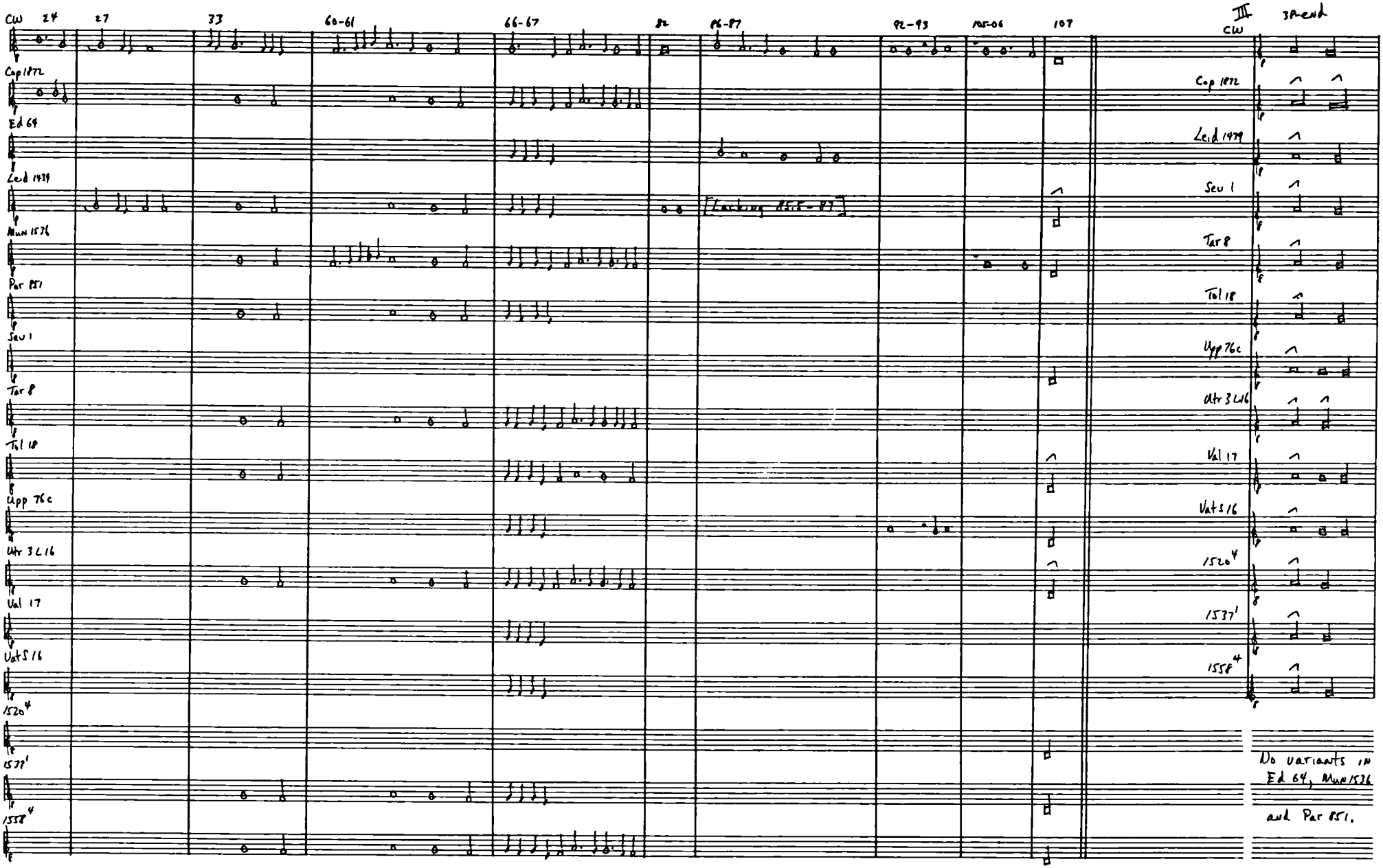

II
CW
5
5
8
14
18
21
27-28
III
CW
35
36-end
Ed 64
Leid 1939
Mun 260
Mun U 401
Par 851
Reg 2202
Sev 1
Tar 8
Tol 18
Upp 76c
Utr S 16
1520#
1537'
1547'
1558⁴
1616²³
Utr 3 C 16
No variants in 1545⁶
No variants in Cop 1872

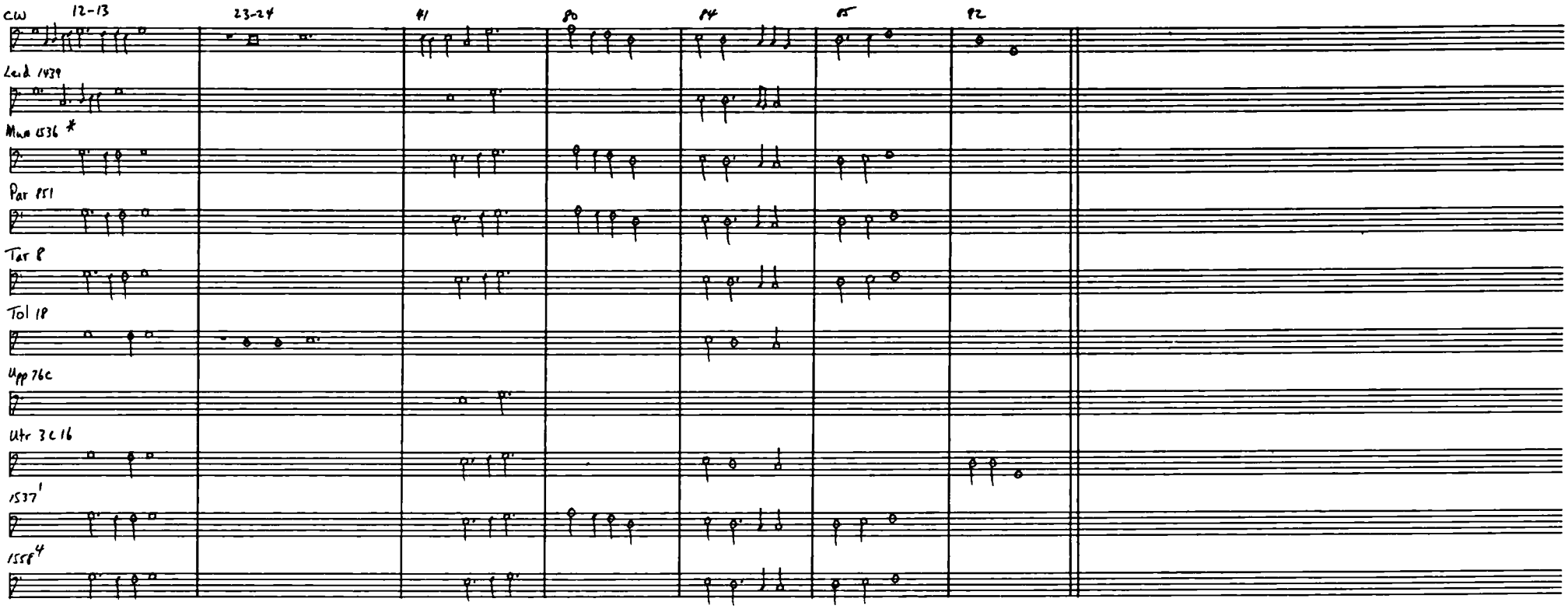

I
CW
9
14
15
18
21-22
25-26
39
40
41-42
44-45
46-47
[sic]
Bol 142
Cop 1972
Ed 64
Leid 1939
Mun 1536
Mun U 401
Par 851
Sev 1
Tar 8
Tol 18
Upp 76c
Utr 3 L 16
Utr S 16
1520 4
1537 1
1558 4
Benedicta es - Quinta vox
219

Benedicta es - Quinta vox (continued)

No variants in Munll 401, Sev 1, Vat S 16 and 1520⁴

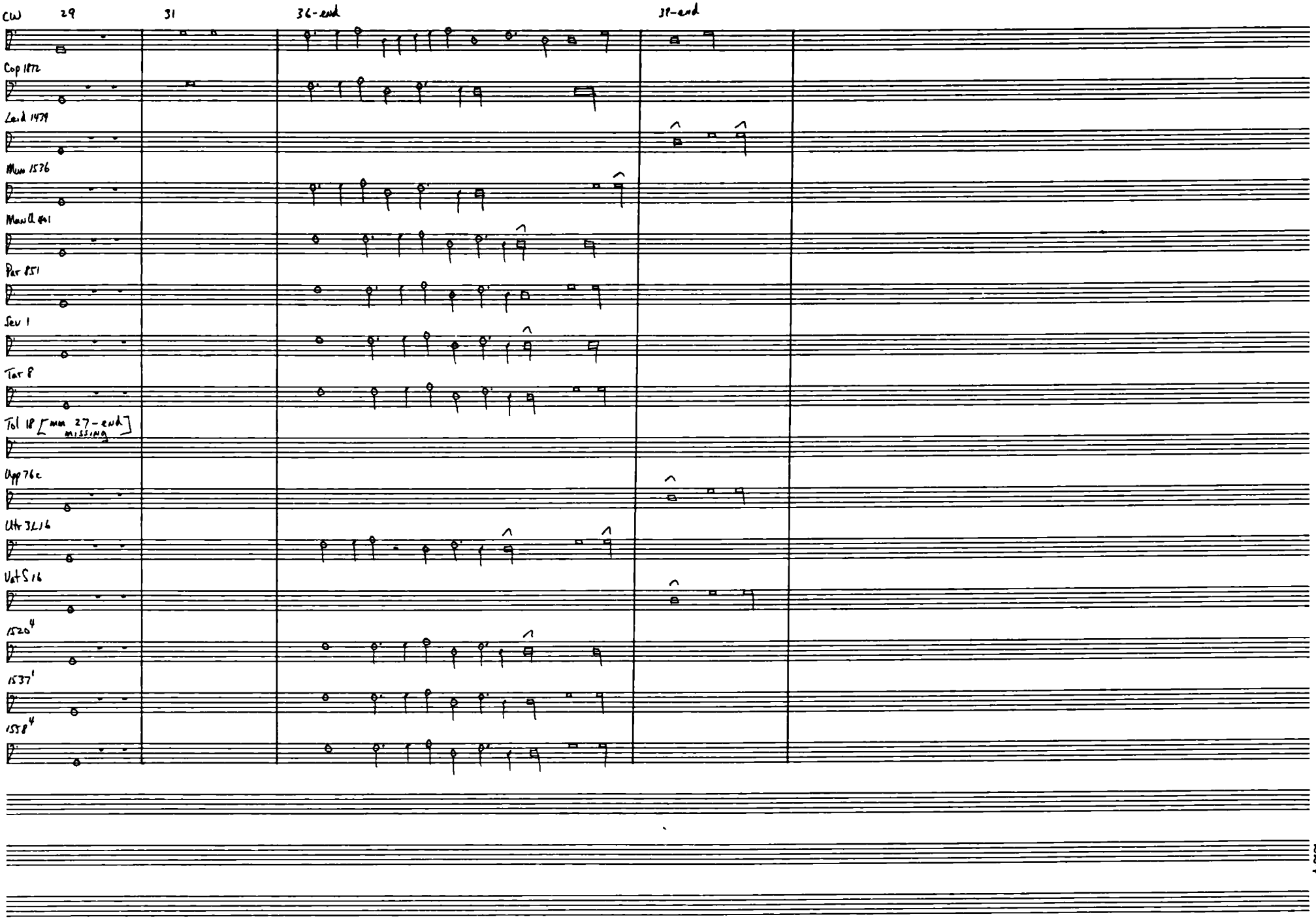

CW
32
34
36-37
38-end
Bol 142
Cop 1872
Ed 64
Leid 1439
Mun 1526
Mun U 401
Par 851
Sev 1
Tar 8
Tol 18
27 ms end missing
Upp 76c
Utr 3 L 16
Vat S 16
1520 4
1537 1
1558 4


I
CW 24
27
33
60-61
66-67
82
86-87
92-93
105-06
107
III
CW
38-end
Benedicta es - Tenor
Cop 1872
Ed 64
Leid 1479
Mun 1536
Par 851
Seu 1
Tar 8
Tol 18
Upp 76c
Utr 3 L16
Val 17
Vat S 16
1520⁴
1537¹
1558⁴
Lacking 86:5 - 87
Do variants in Ed 64, Mun 1536 and Par 851.



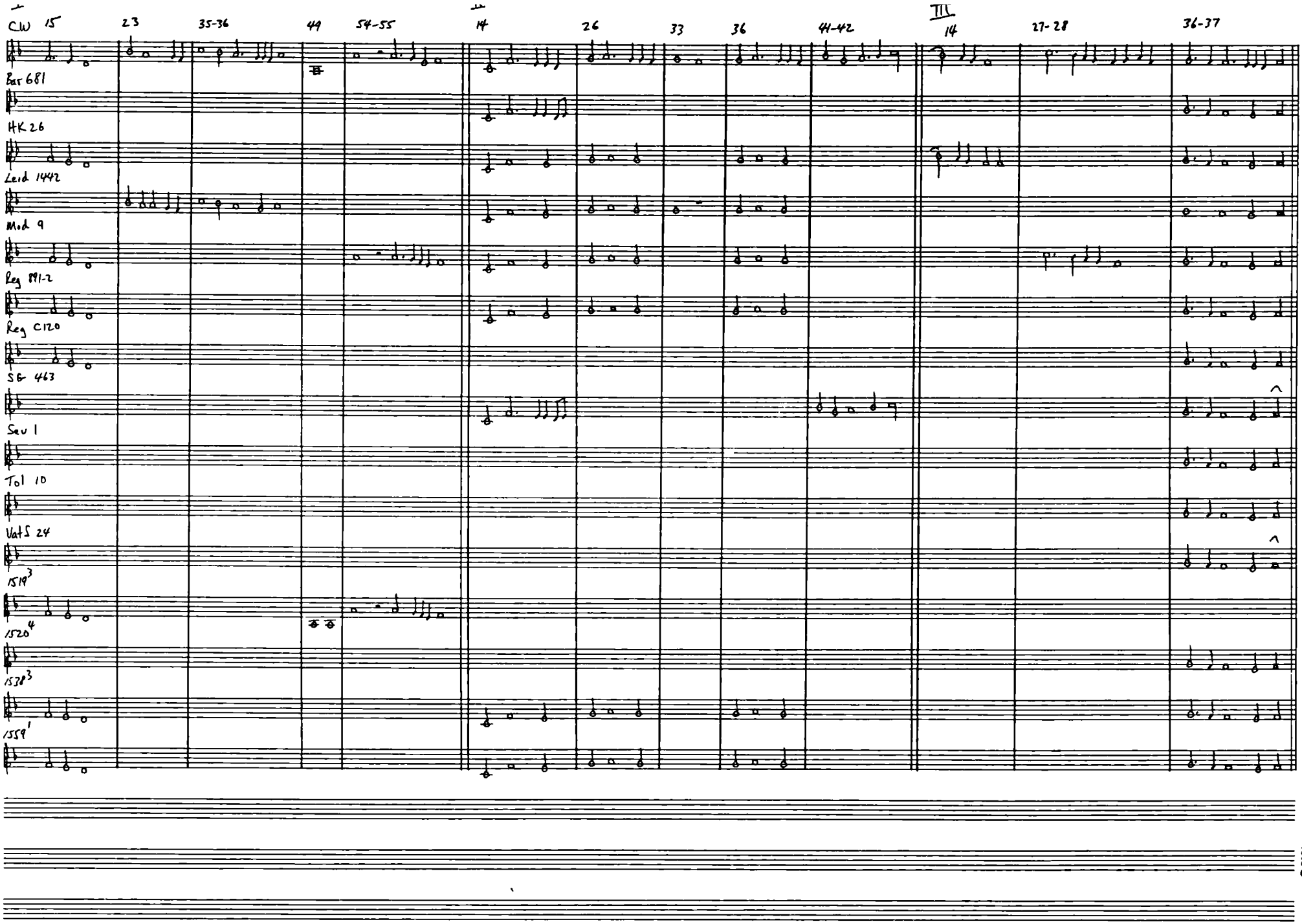
* mm 75-76 repeated 2 extra times (ie, 3 times in all)

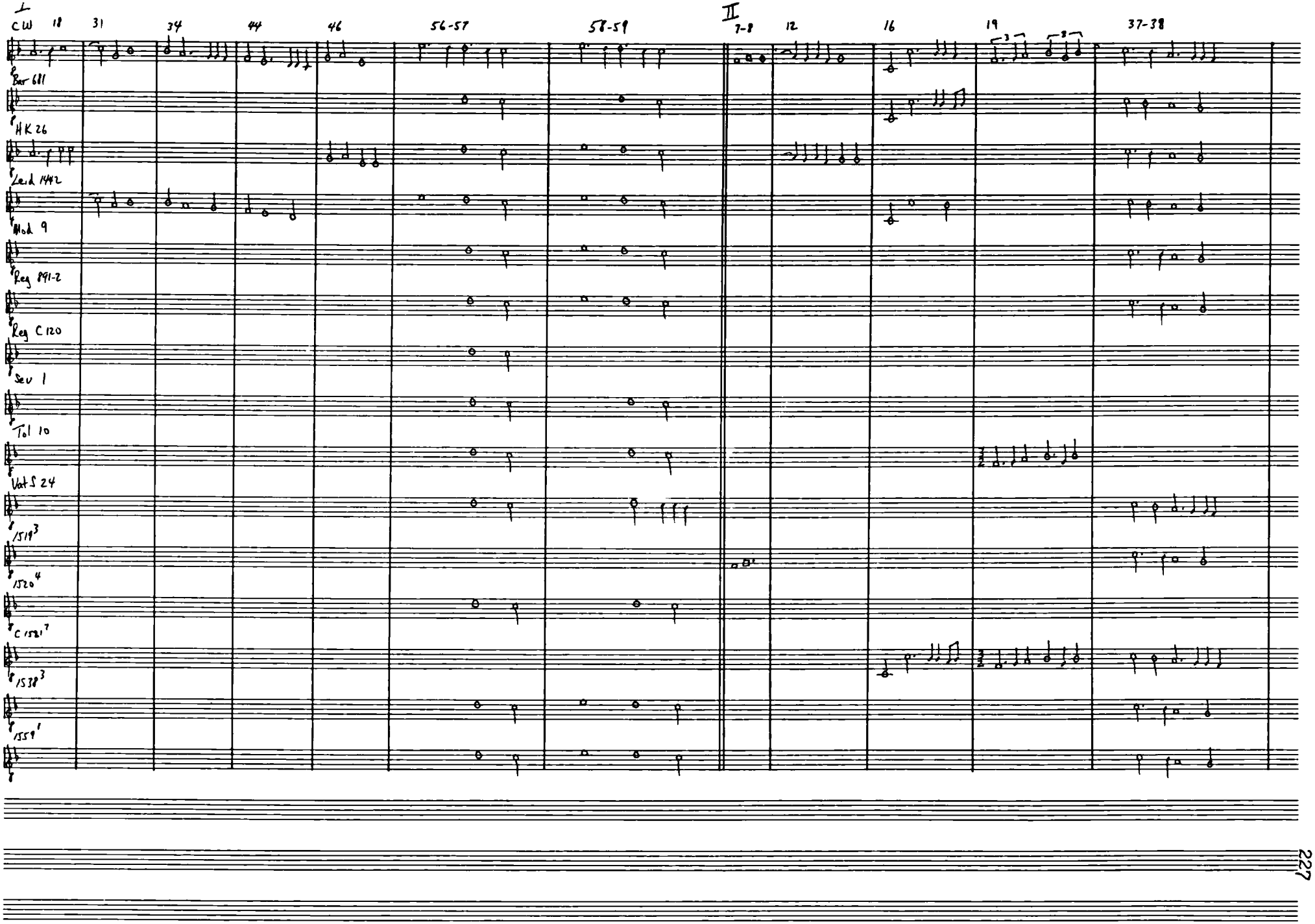
No variants in Cop 1872, Mun A 401, Sev 1, Vat S 16 and 1520[4].



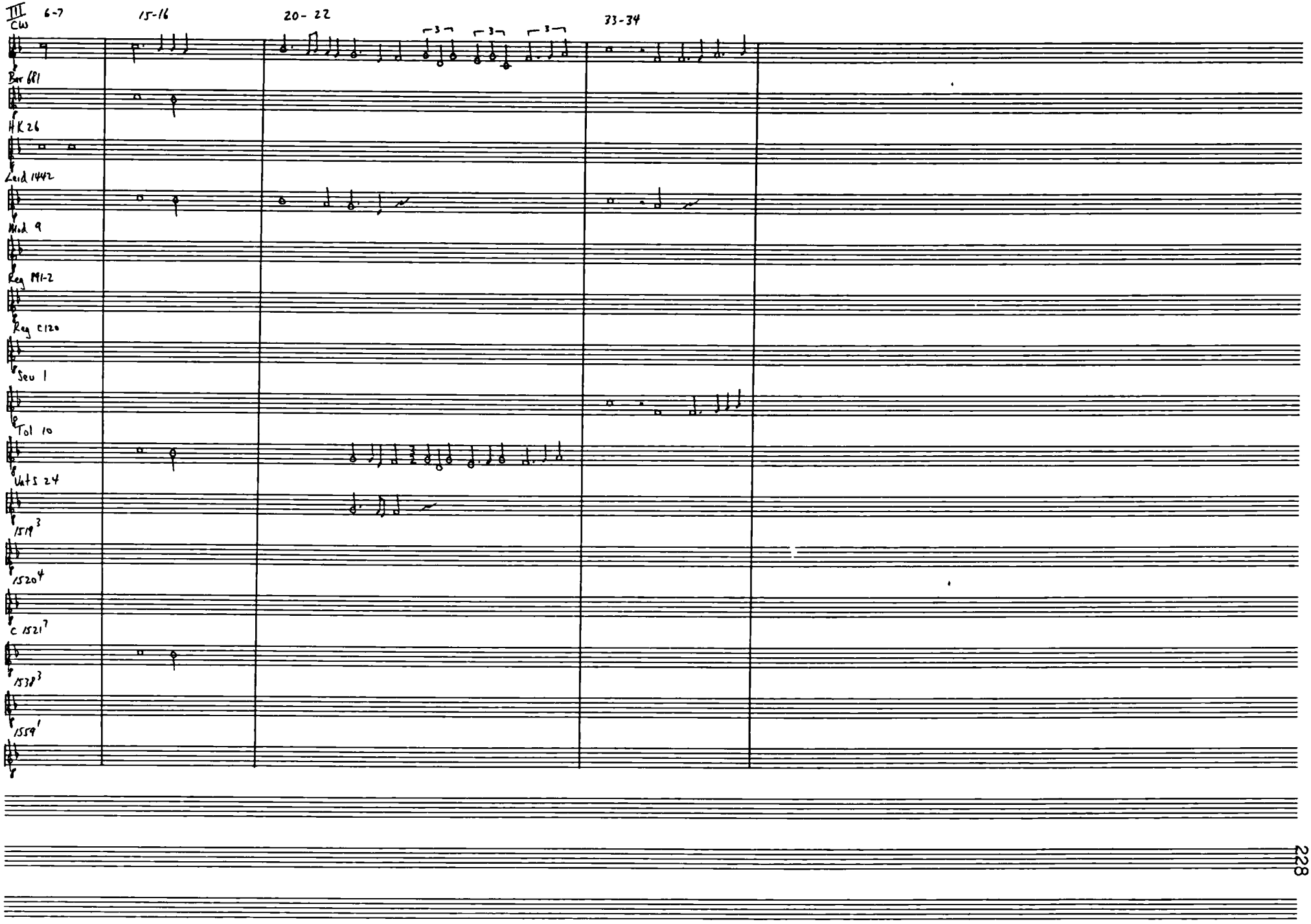
Benedicta es - Bassus (continued)

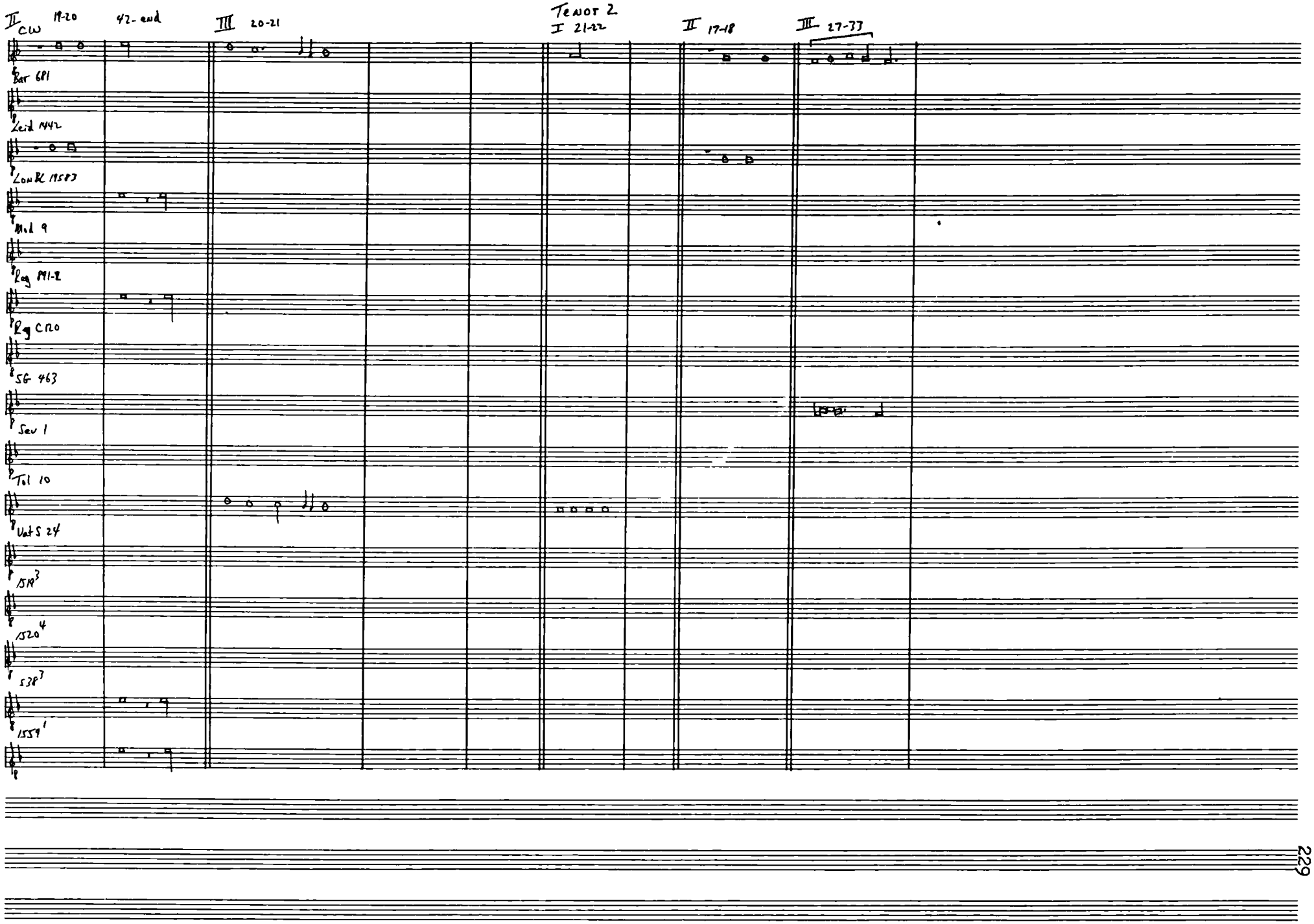

I
CW
6
21
32-38
41-42
49
78
89
91-92
106
III
CW
76-end
Cop 1572
Ed 64
Leid 1979
Mun M 401
Par 851
Rok 22
Sev 1
Tar 8
Tol 18
Mm. 27-end missing
Upp 76c
Utr 3 L 16
Vat S 16
1520⁴
1537¹
1558⁴


I
CW 15
23
35-36
49
54-55
II
14
26
33
36
41-42
III
14
27-28
36-37
Bar 681
HK 26
Leid 1442
Mod 9
Reg 891-2
Reg C120
SG 463
Sev 1
Tol 10
Vat S 24
1519 3
1520 4
1538 3
1559 1
Invidiata - Superius

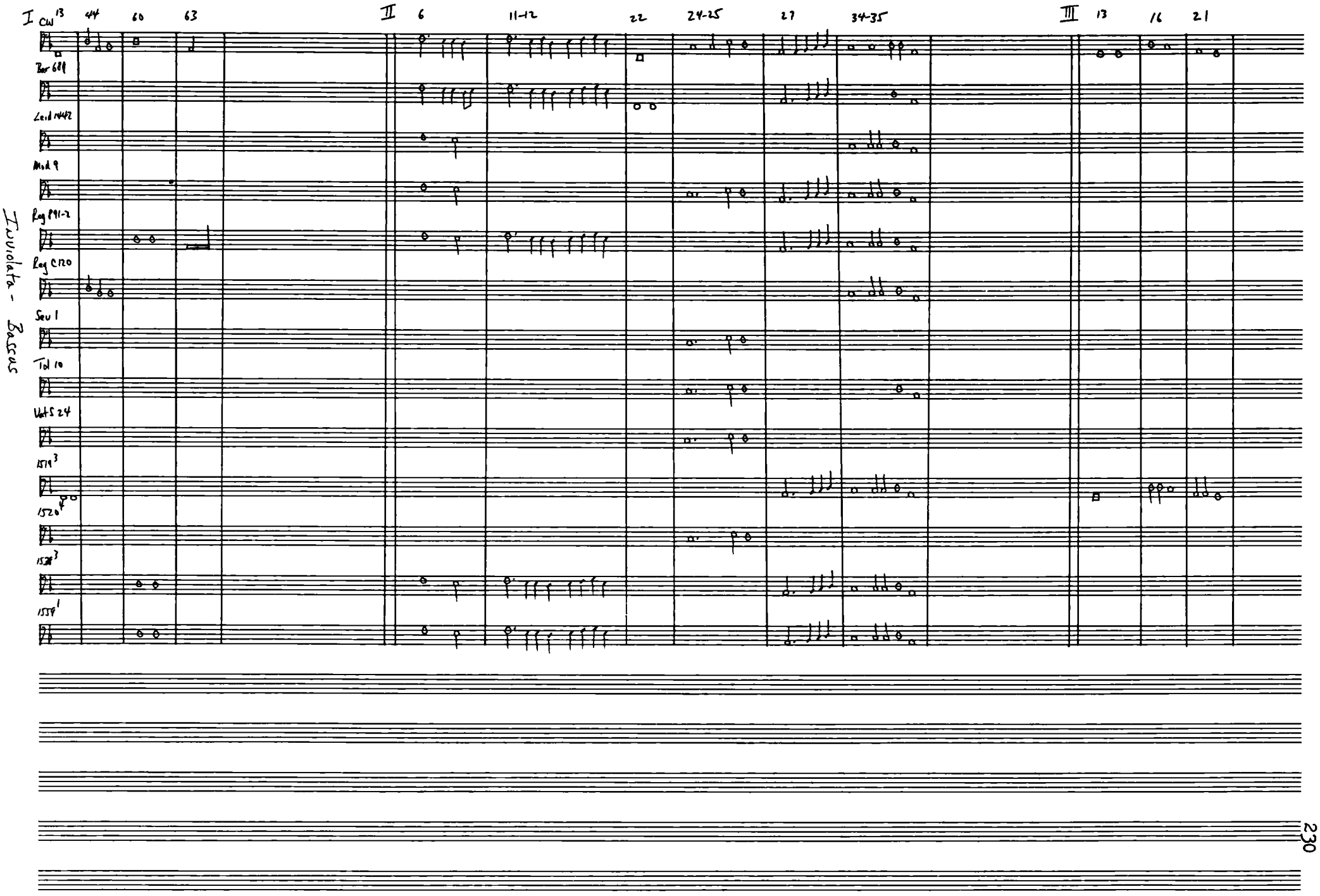


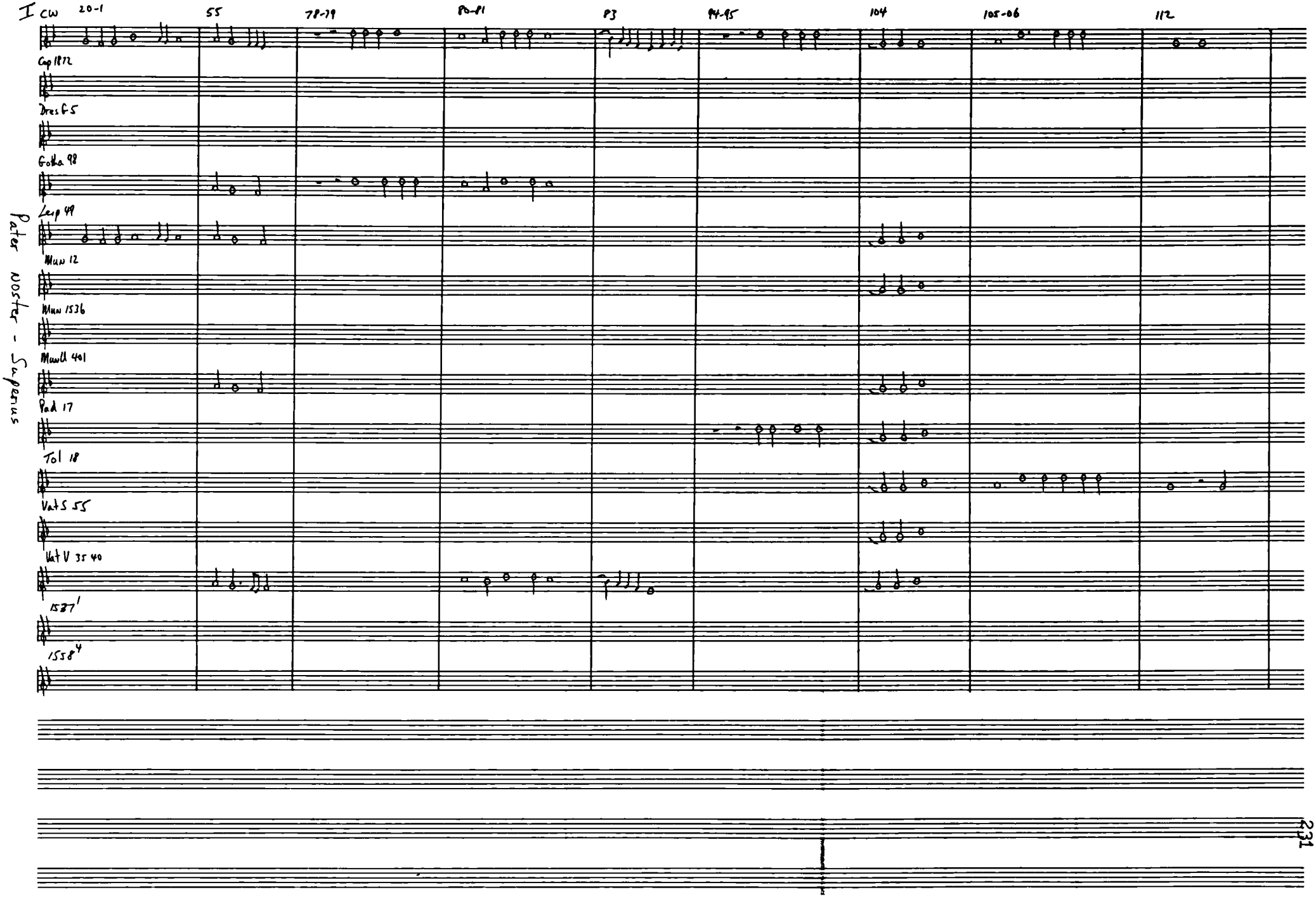
Involata - Athus

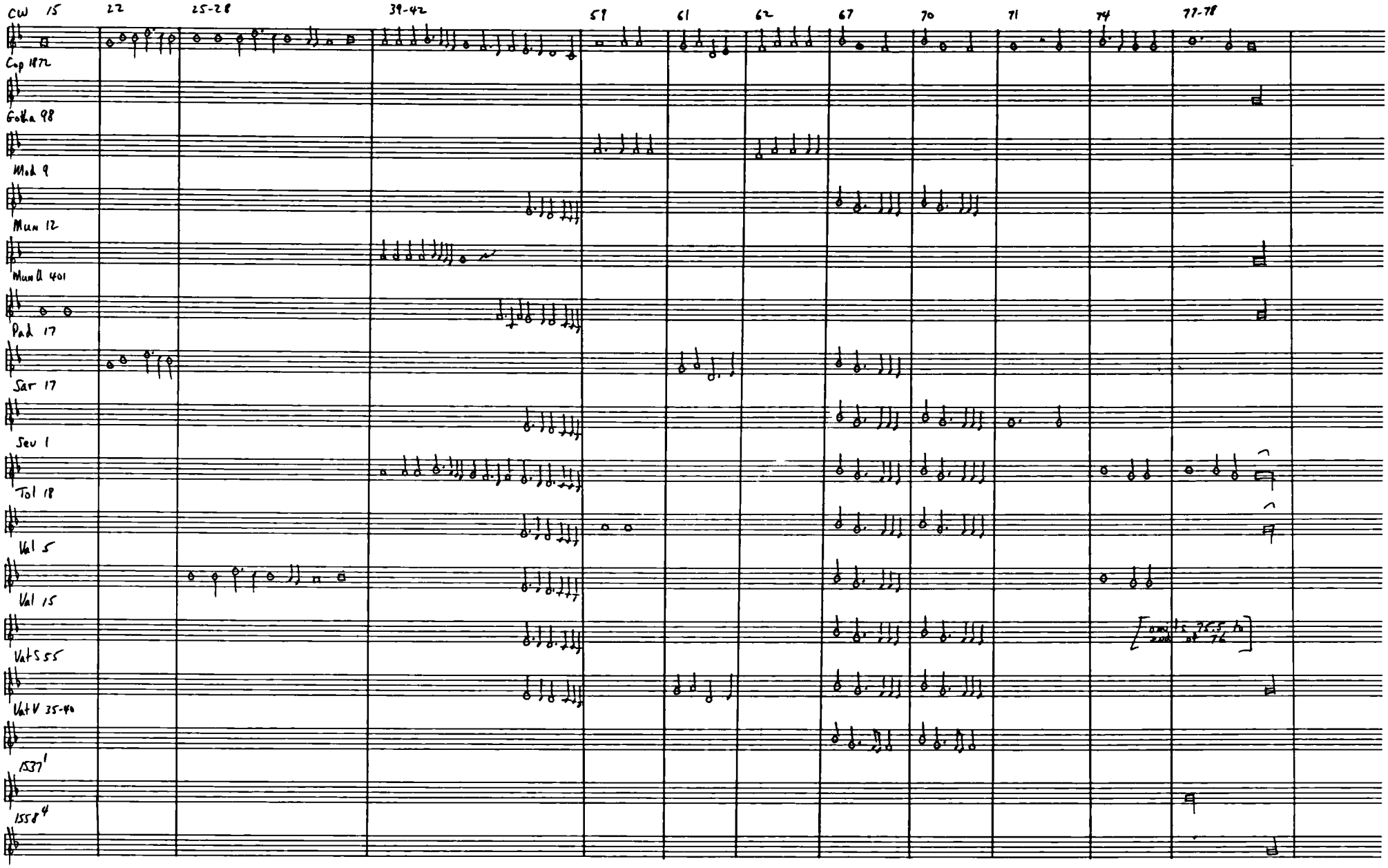

III
CW
6-7
15-16
20-22
33-34
Bar 681
HK 26
Leid 1442
Mid 9
Reg M1-2
Reg C120
Seu 1
Tol 10
Uts 24
1519 3
1520 4
C 1521 7
1538 3
1559 1
Tutta - Hats (continued)



Tenor 1 and Tenor 2

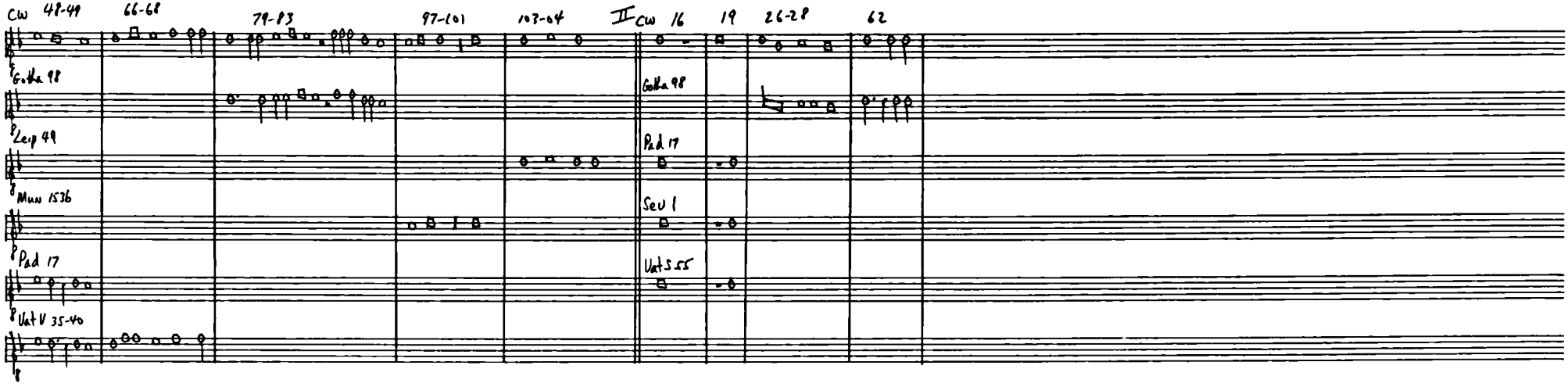

I
II
III
13
44
60
63
6
11-12
22
24-25
27
34-35
13
16
21
CW
Bar 689
Leid 1442
Mid 9
Reg 891-2
Reg C120
Sev 1
Tol 10
Vat S 24
1519
1520
1528
1534
Invidiata - Bassus


I CW 20-1
55
78-79
80-81
83
94-95
104
105-06
112
Cop 1872
Dres 65
Gotha 98
Lesp 99
Mun 12
Mun 1536
Munch 401
Pad 17
Tol 18
Vat S 55
Vat V 35 40
1587
1558
Pater noster - Superius
231



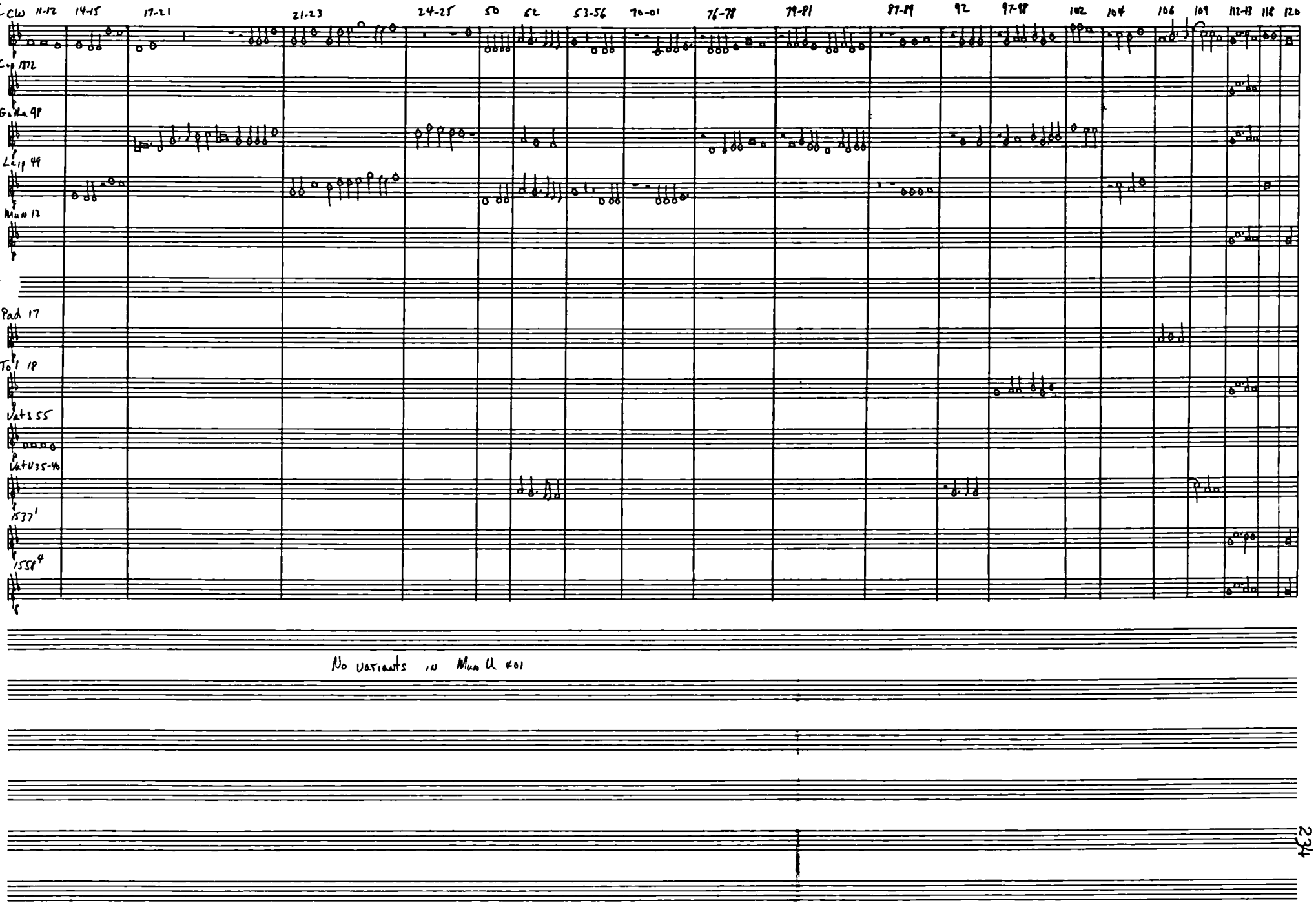
Pater Noster - Superius (cont.)

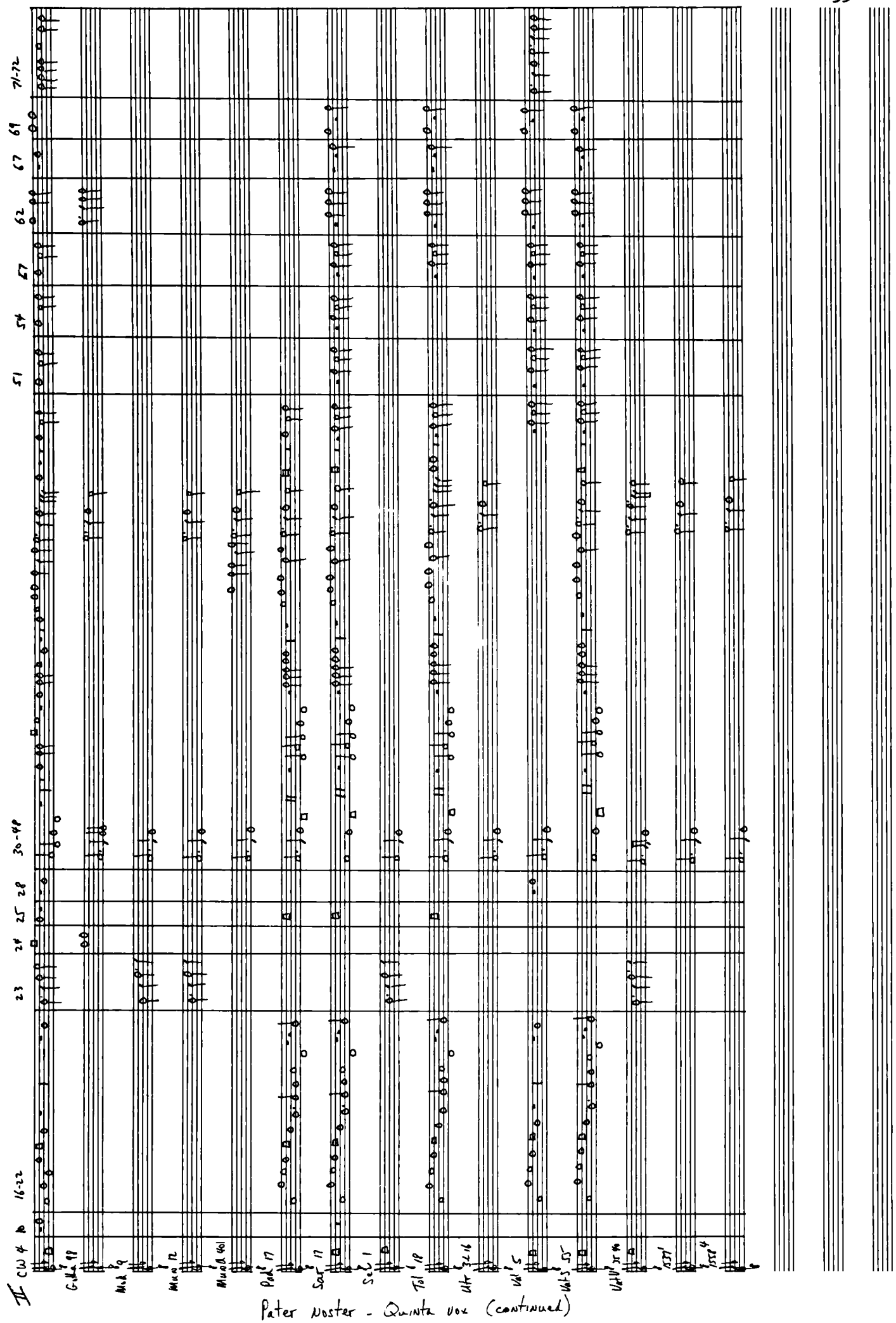
No variants in Dres 6 5, Man 1536 and Utr 3616



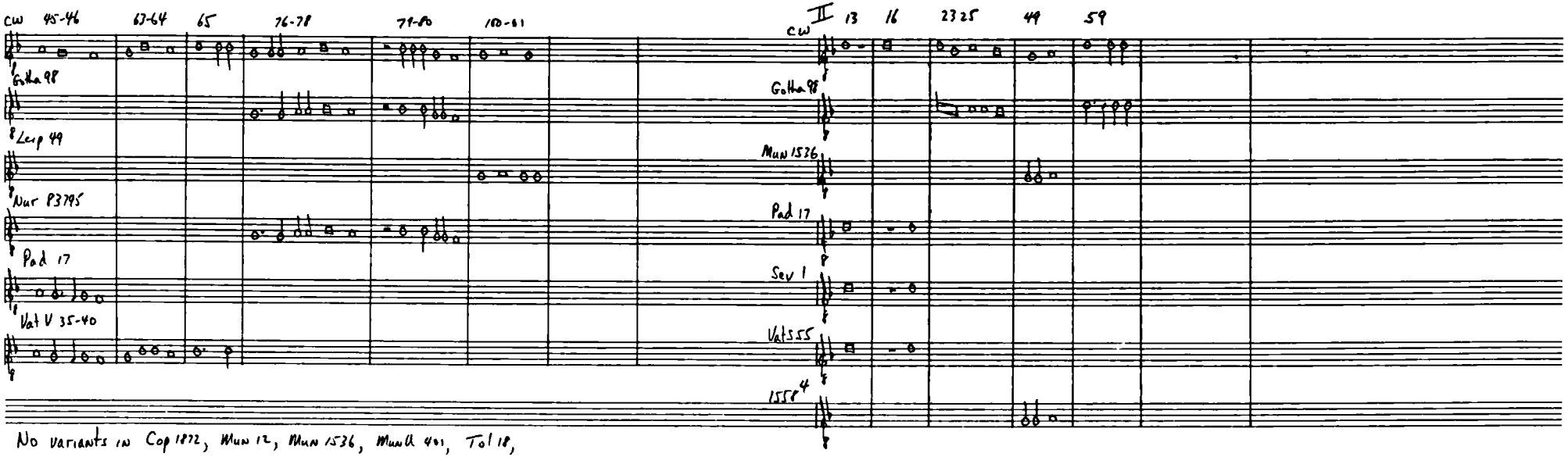
No variants in Cop 1872, Mun 12, MunU 401, Tol 18, Vats 55, 1537[1] and 1558[4]

No variants in Cop 1872, Mod 9, Mun 12, Mun 1536, MunU 401, Sar 17, Tol 18, Utr 3 c 16, Val 5, Val 15, Vat V 35-40, 1537[1], 1558[4]


I CW 11-12 14-15 17-21 21-23 24-25 50 52 53-56 70-01 76-78 79-81 87-89 92 97-98 102 104 106 109 112-13 118 120
Cup 172
Gamba 98
Clip 99
Mun 12
Pad 17
Tol 18
Vats 55
Vat V 35-46
1577'
1558'
Pater Noster - Quinta vox
No variants in Man U #01
234



Pater Noster - Quinta vox (continued)



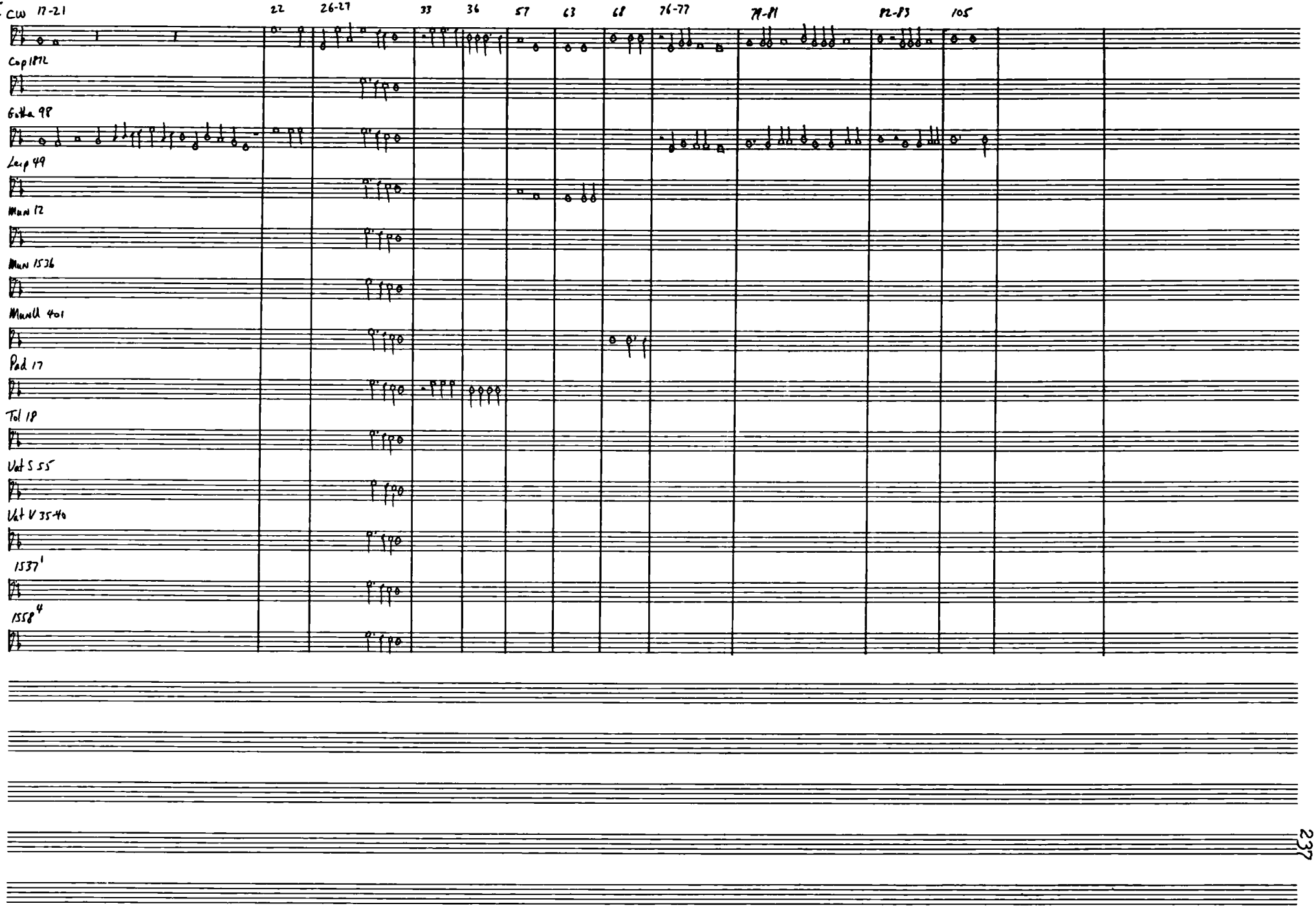
No variants in Cop 1872, Mun 12, Mun 1536, Munll 401, Tol 18,

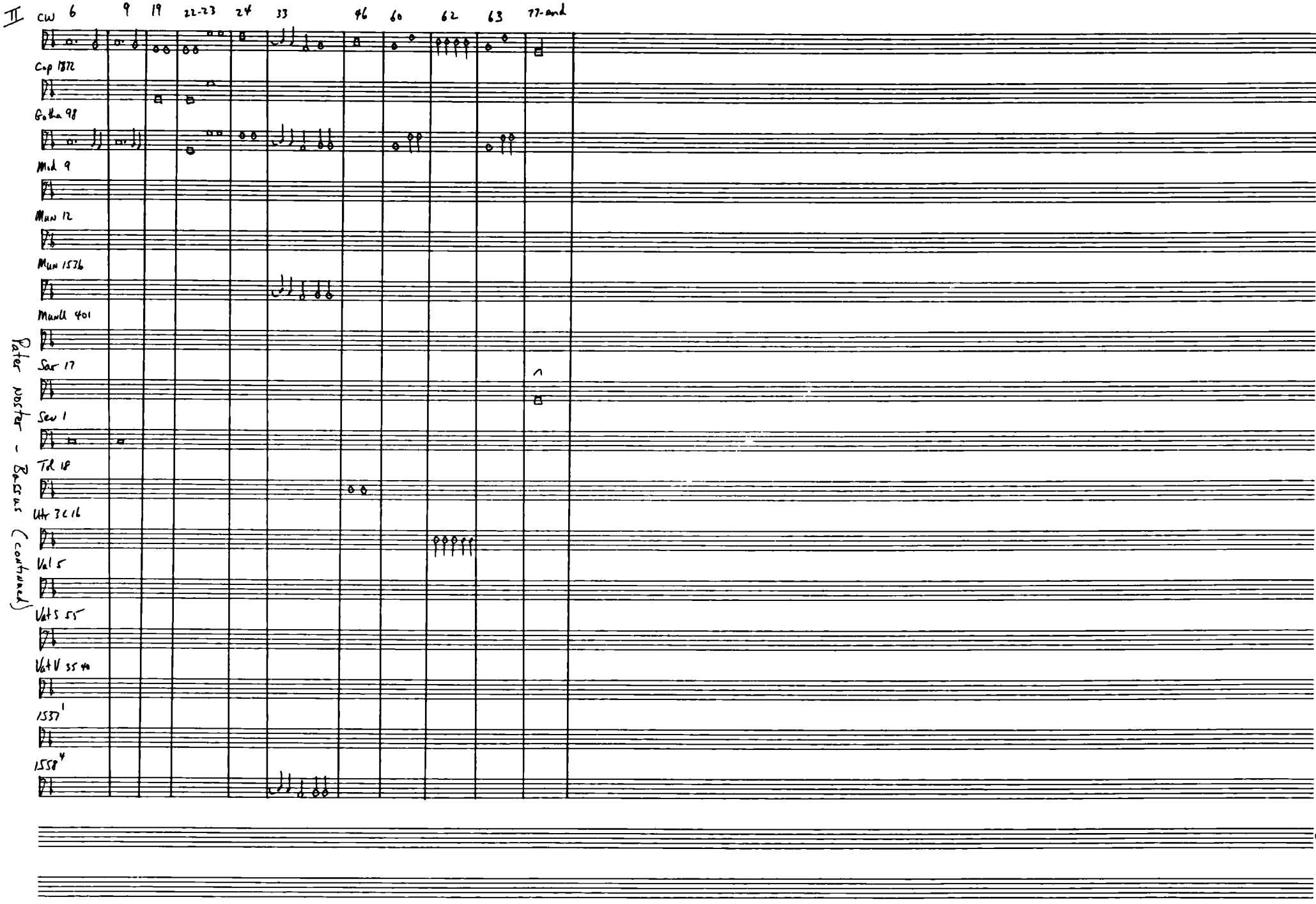
Val 15, Vat S 55, 1537¹ and 1558⁴

No variants in Cop 1872, Mod 9, Mun 12, Munll 401,

Nur P3795, Sar 17, Tol 18, Utr 3 L 16,

Val 5, Vat V 35-40 and 1537¹


I CW 17-21
22
26-27
33
36
57
63
68
76-77
79-81
82-83
105
Cop 1572
Gotha 98
Leip 49
Mun 12
Mun 1536
Munll 401
Pad 17
Tol 18
Vat S 55
Vat V 35-40
1537'
1558⁴
Later Master - Basses


II
CW 6
9
19
22-23
24
33
46
60
62
63
77-end
Cop 1572
Gotha 98
Mid 9
Mun 12
Mun 1576
Mun 401
Sar 17
Sev 1
Tol 18
Utr 7 c 16
Val 5
Vat S 55
Vat V 35 40
1557
1558

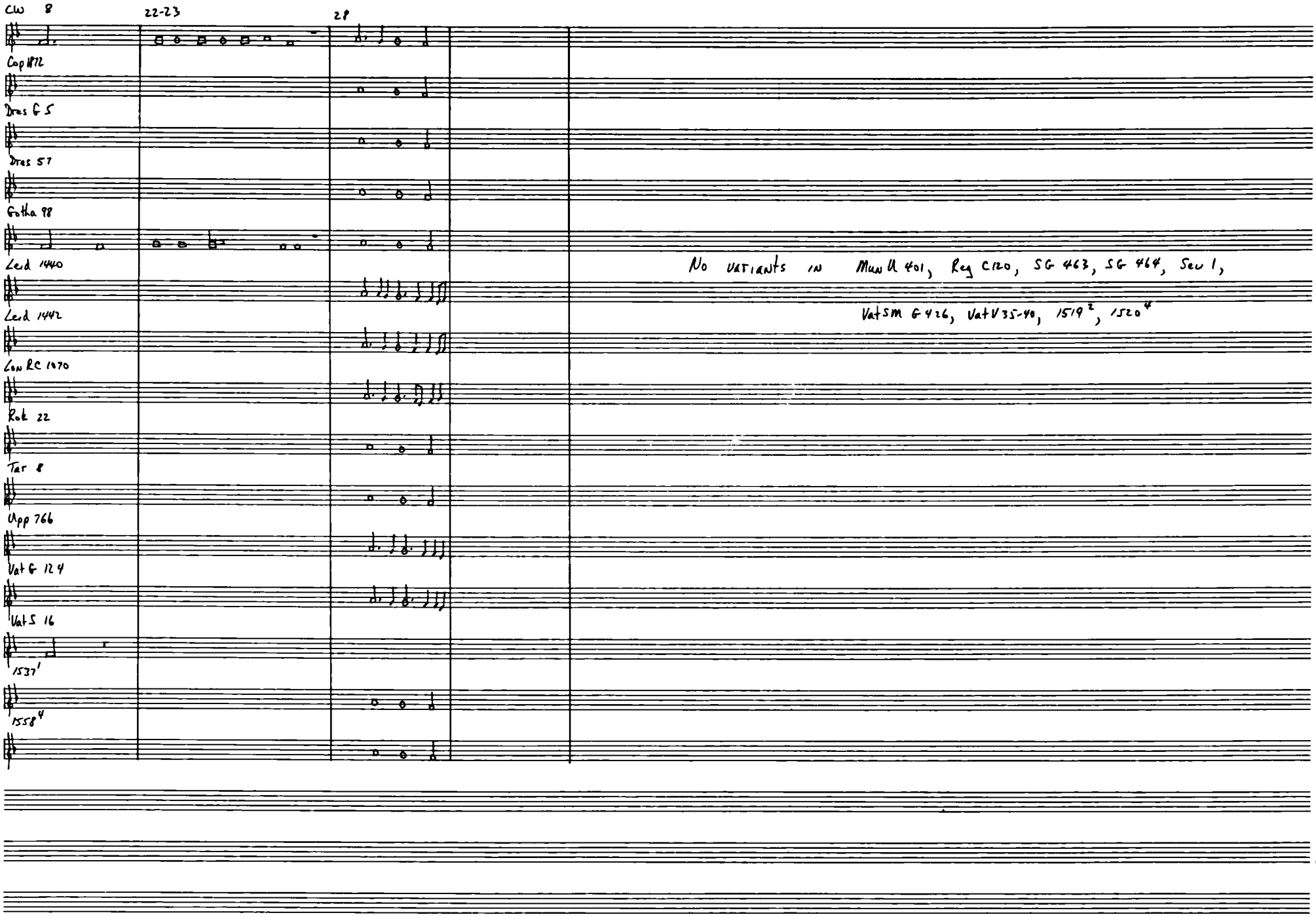
No variants in Cop 1872, Dres G 5, Mod 9, Mun 12,

Pad 17, Sar 17, Tol 18, Utr 3 C 16,

Vat S 55, 1537[1] and 1558[4]

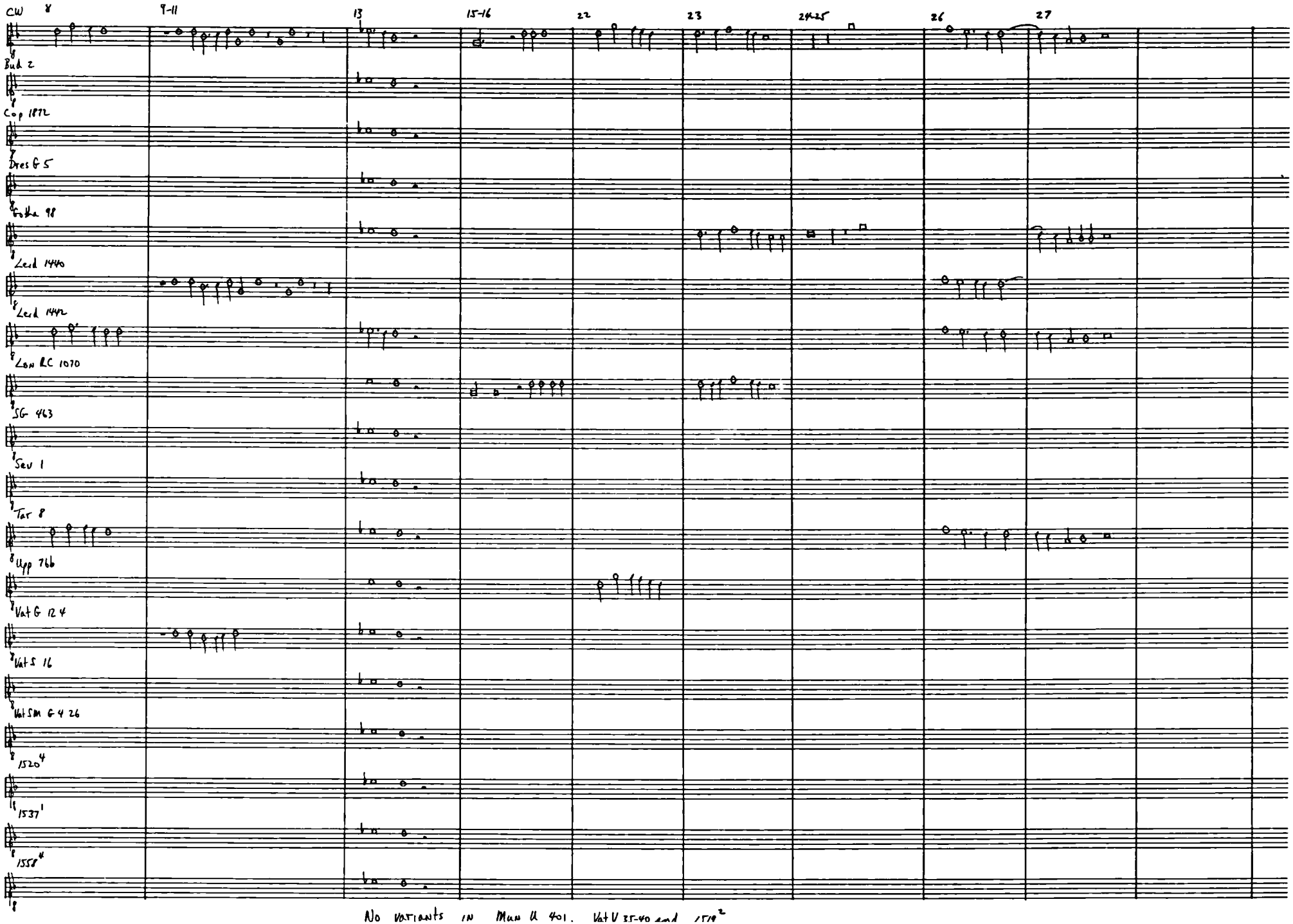
No variants in Cop 1872, Mun 12, Tol 18, Vat S 55, 1537[1] and 1558[4]

Pater noster - Sexta vox



Praeter rerum - Superius

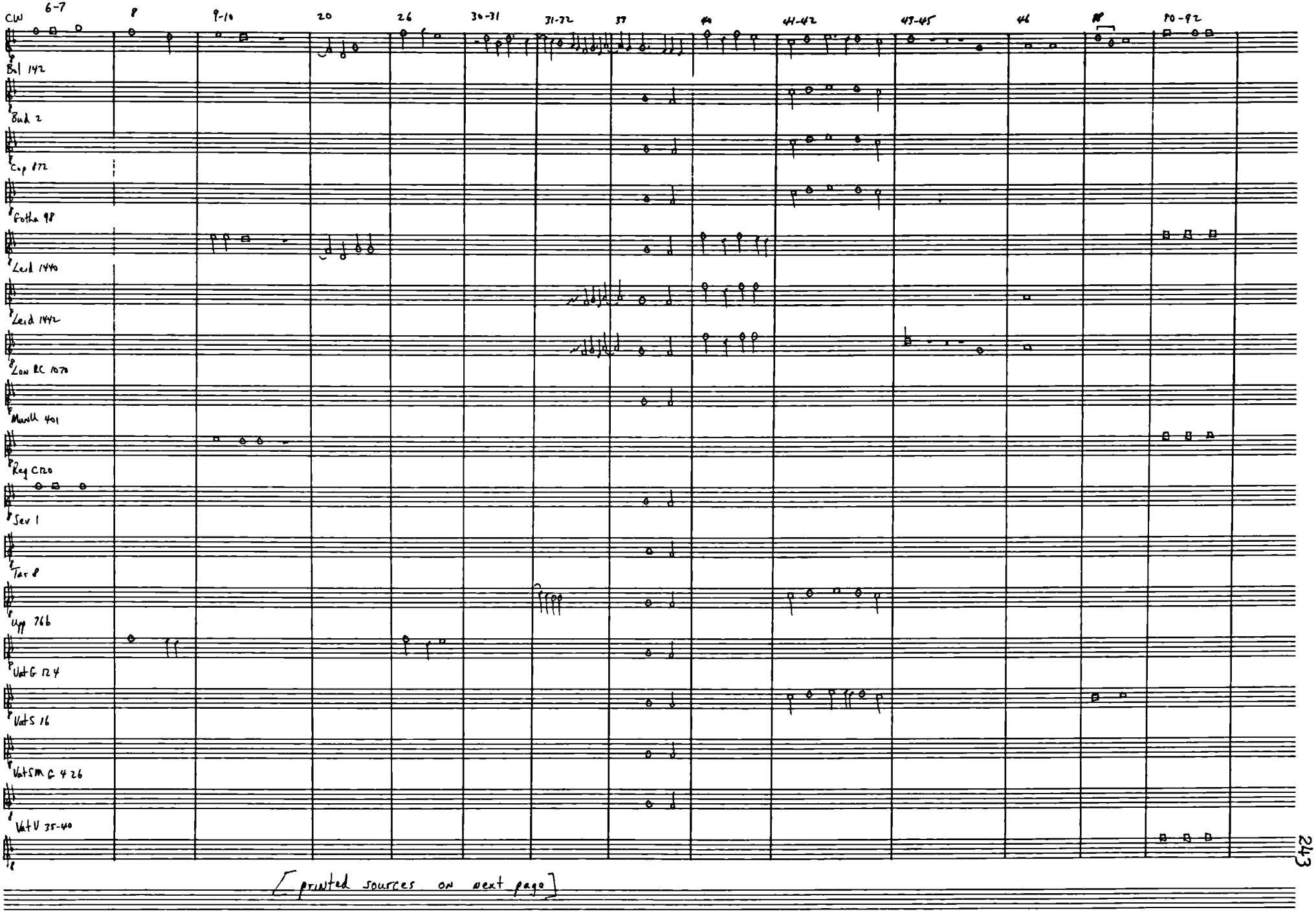
No variants in Dres G 5, Dres 58, Leid 1442, Rok 22, Tar 8, Upp 76b, Vat V 3540, 1592.



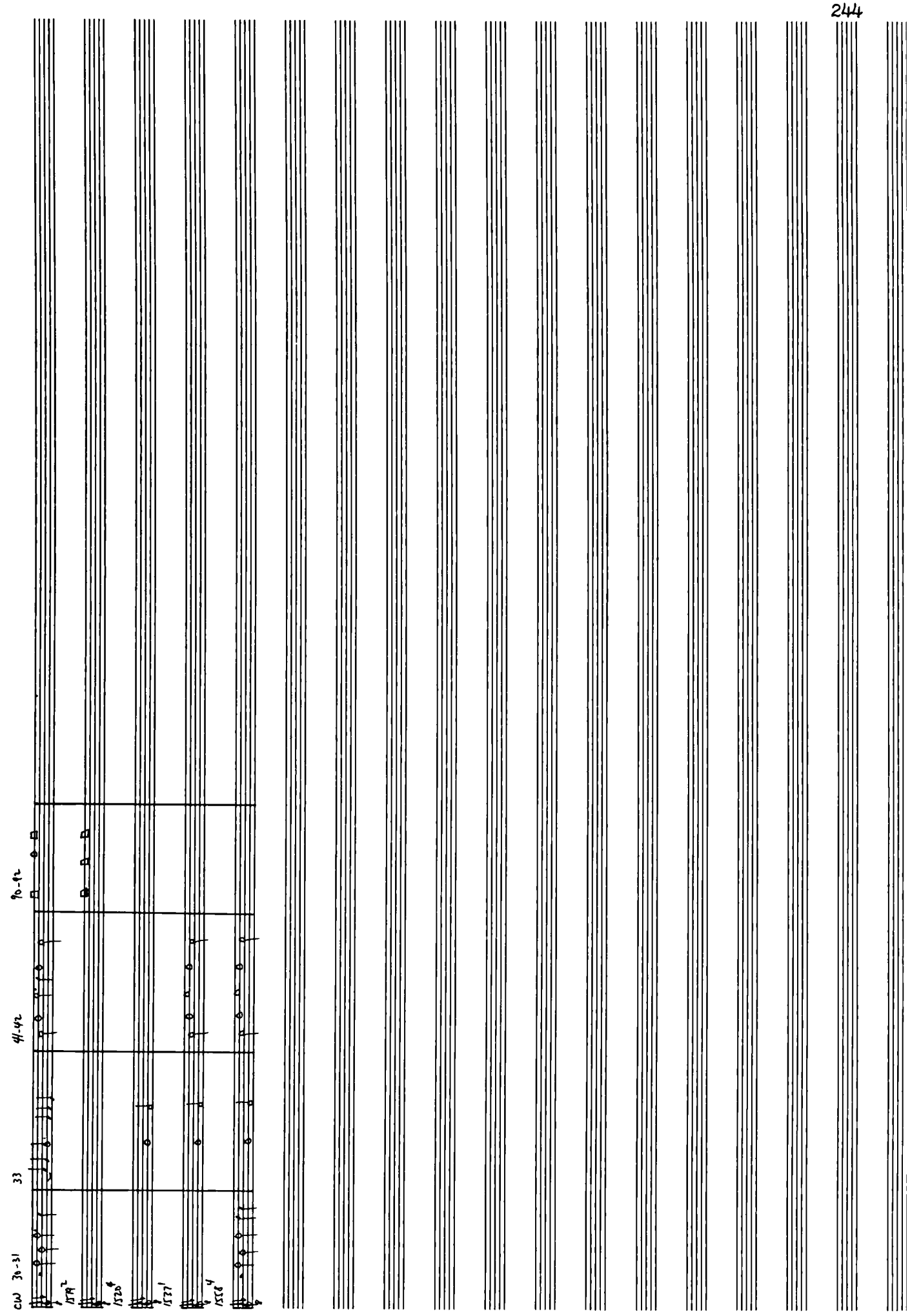
No variants in Mun A 401. Vat V 35-40 and 1570²

II

Fractur return - Altus (continued)



[printed sources on next page]



II

Praeter rerum - Altus (continued)

CW 4 | 7 | 8 | 14 | 15-16 | 20-21 | 22 | 25 | 28- end

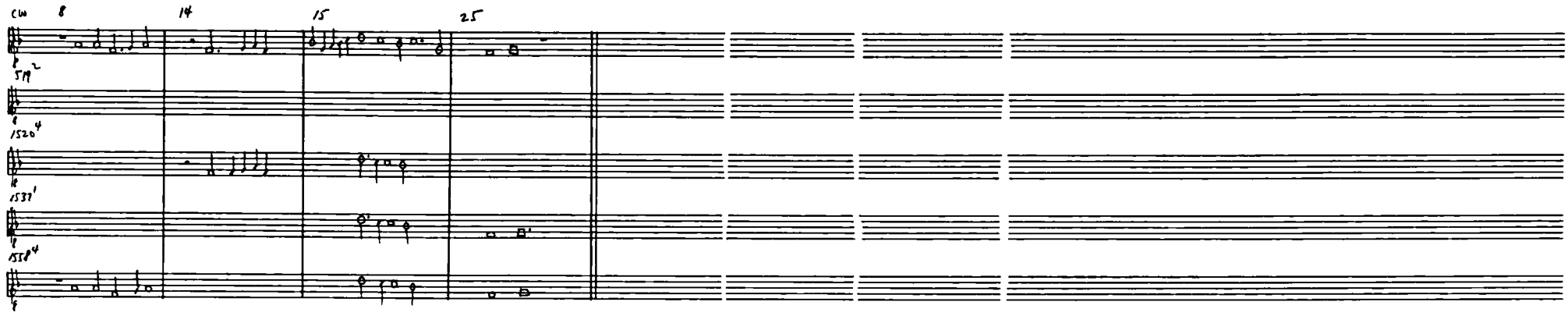
Bud 2
Cop 1872
Dres 57
Gotha 98
Leid 1444
Leid 1492
LowRC 1070
Mun M 401
Reg 1120
SG 463
Sev 1
Tor 8
Upp 766
Vat S 16
Vat Sm G 4 26
Vat V 35 40

[ie, ends in m 28]

No variants in Vat G 12 4 and 1519²

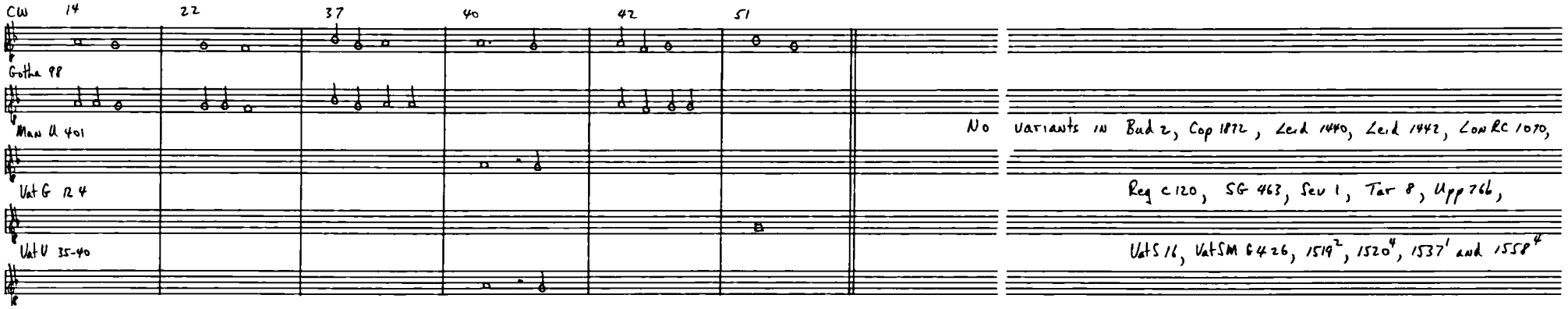
[printed sources on next page]

I



Praeter rerum - Tenor 1

II

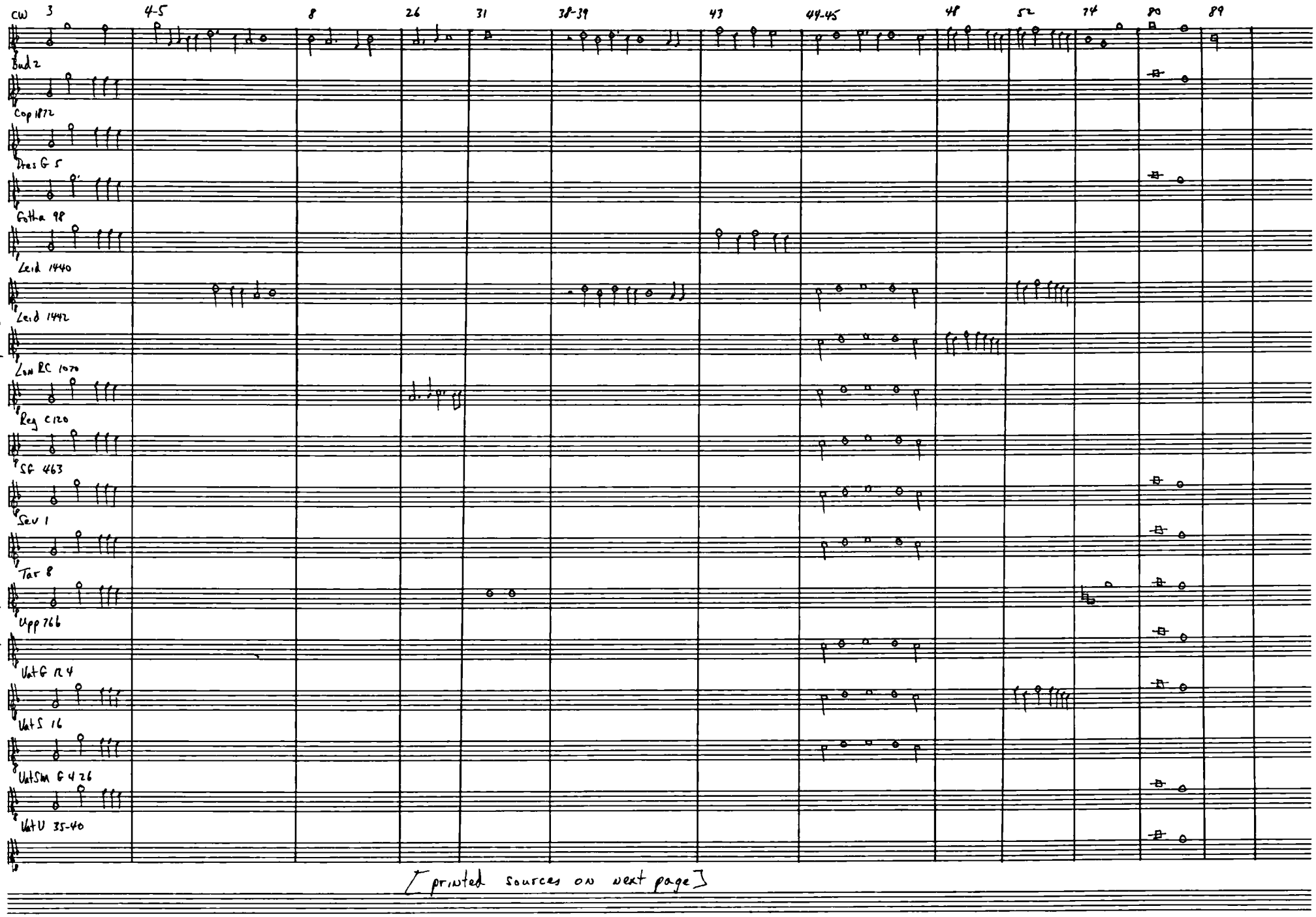


No variants in Bud 2, Cop 1872, Leid 1440, Leid 1442, LonRC 1070, Reg c120, SG 463, Sev 1, Tar 8, Upp 766, VatS 16, VatSM 6426, 1519^2, 1520^4, 1537^1 and 1558^4

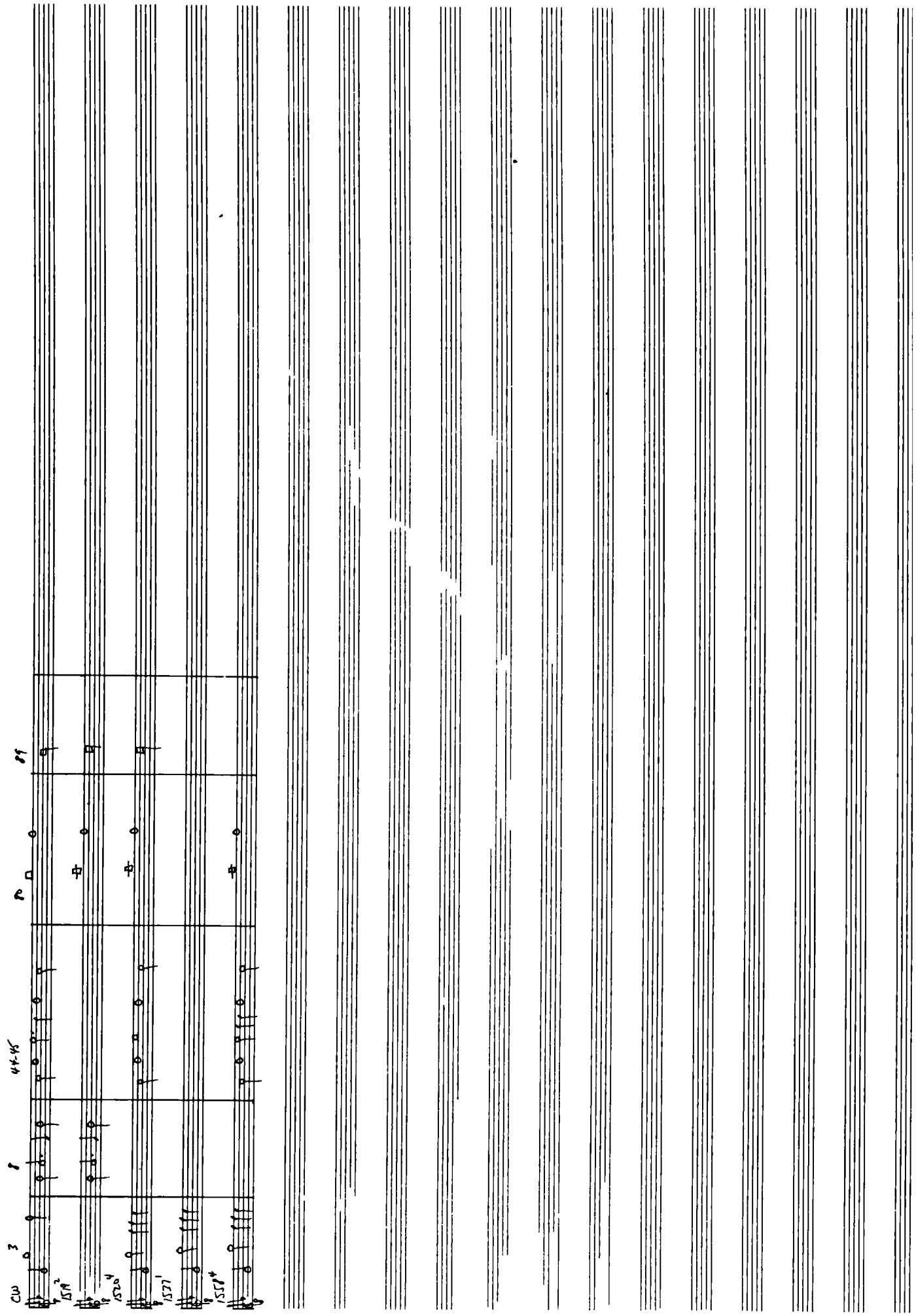
No variants in LonRC 1070, Reg c120, VatG 124, VatS 16, VatSM G426, VatV 35-40 and 1519²

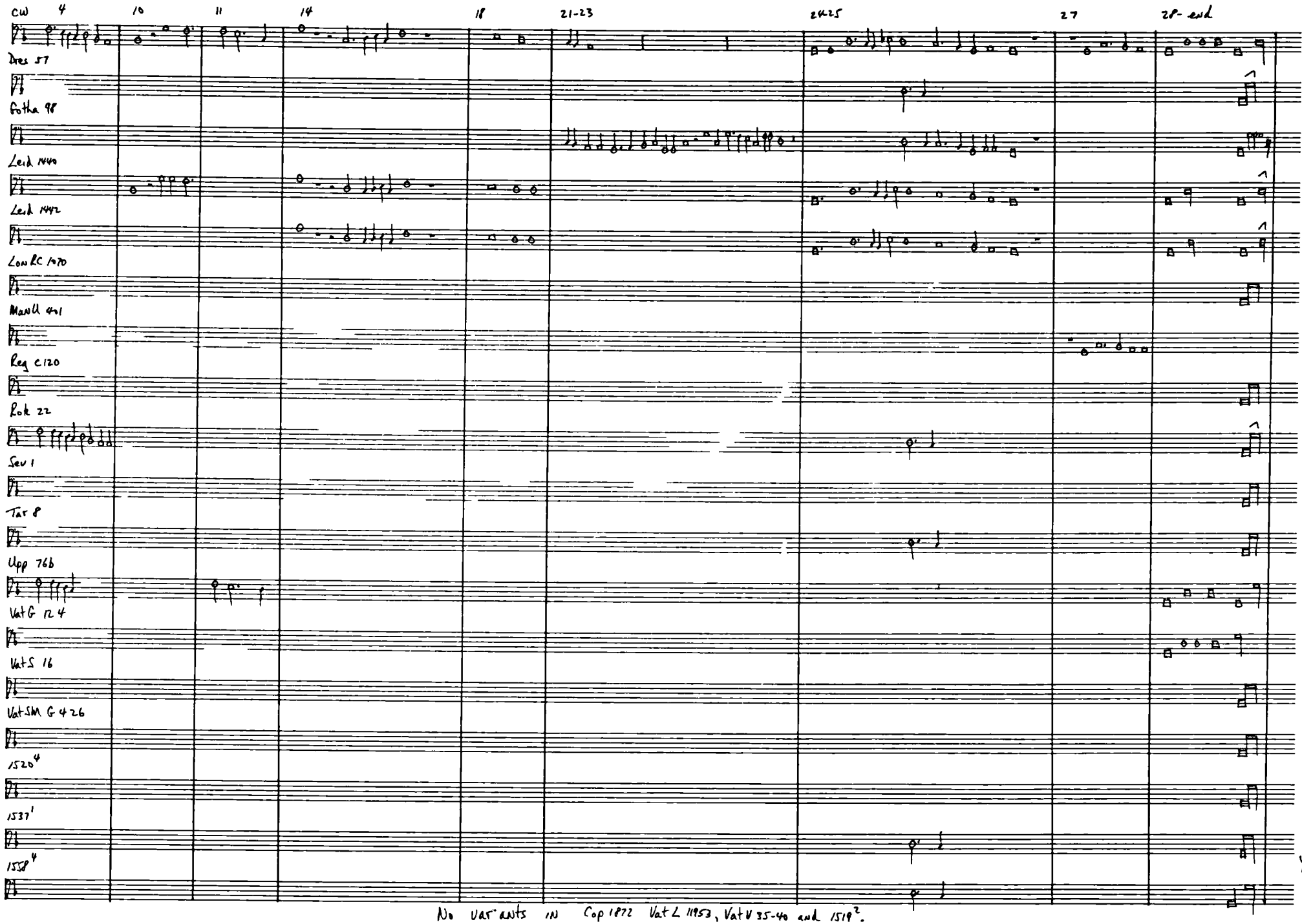
II

praeter rerum - Tenor 2 (continued)



[printed sources on next page]

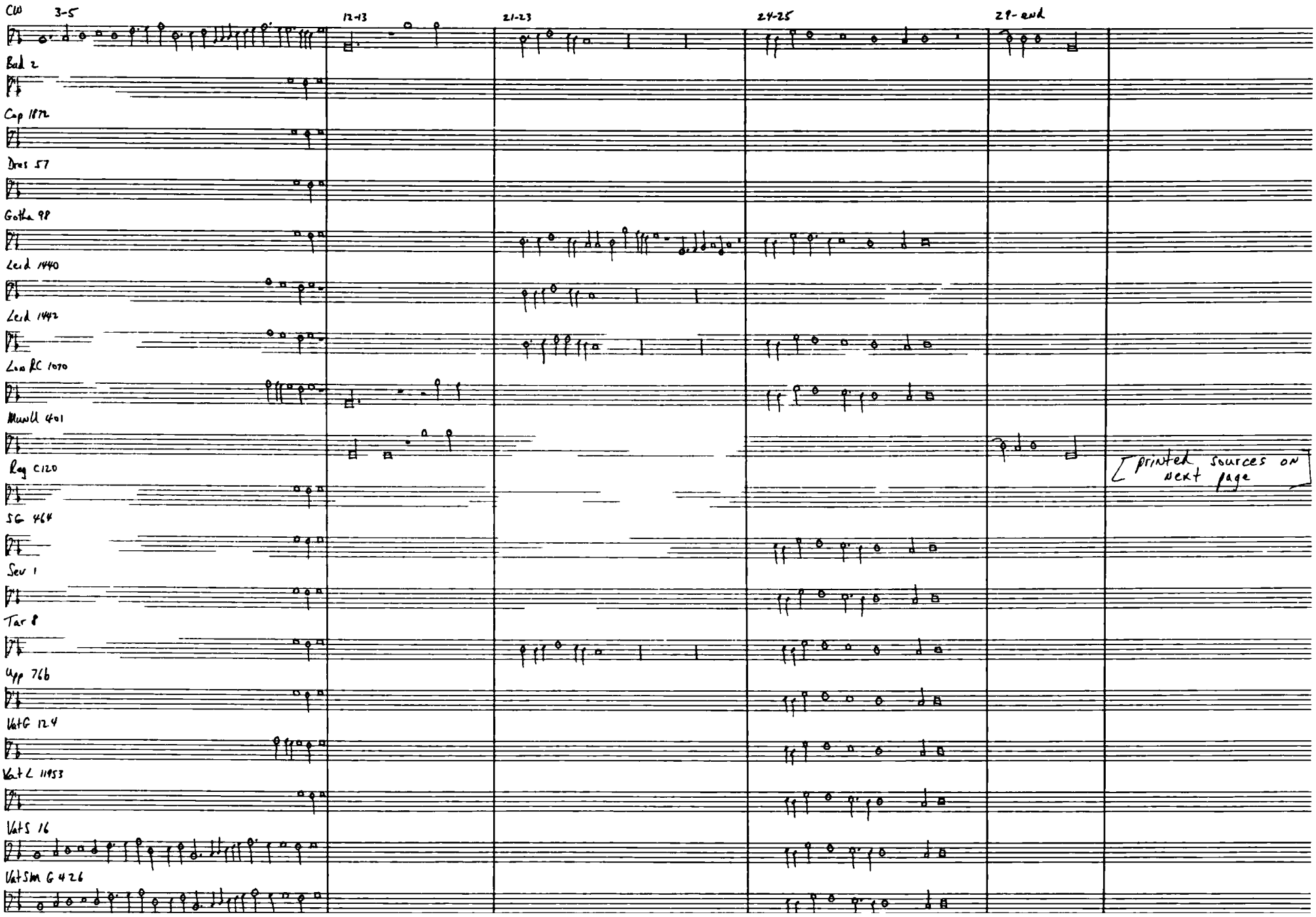

CW
3
1
44-45
p
ff
1518
1520
1521
1522



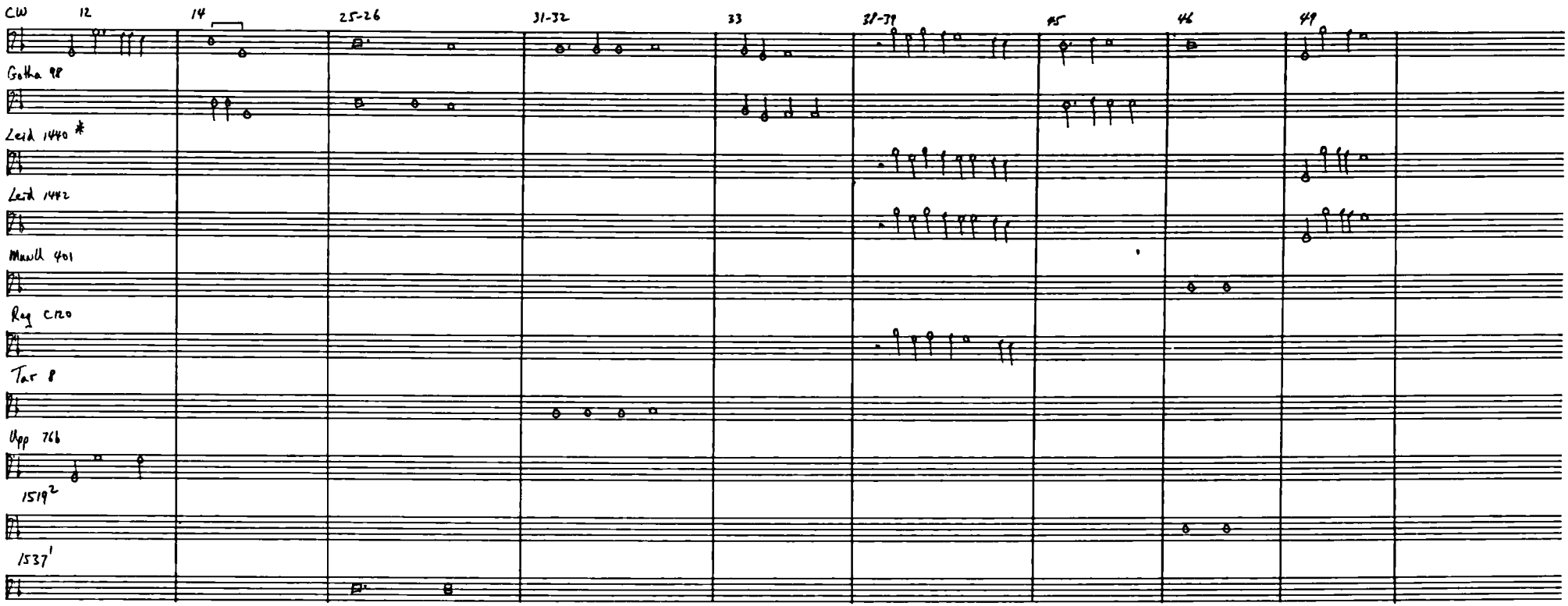
Praeter rerum - Recuus I

No variants in Cop 1872 VatL 11953, VatV 35-40 and 1519².

No variants in Cop 1872, Dres 57, Leid 1440, Rok 22, Sev 1, Tar 8, Vat G 124, Vat S 16, Vat SM G 426, 1519[2], 1537[1], 1520[4], 1558[4]


CW 3-5
12-13
21-23
24-25
29- end
Bad 2
Cap 1872
Dres 57
Gotha 98
Leid 1440
Leid 1442
Lon RC 1070
Mun 401
Reg C120
SG 464
Sev 1
Tar 8
Upp 76b
VatG 124
VatL 11953
VatS 16
VatSM G 426
printed sources on next page

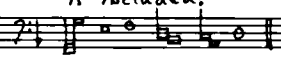
Praeter rerum - Bassus 2 (continued)



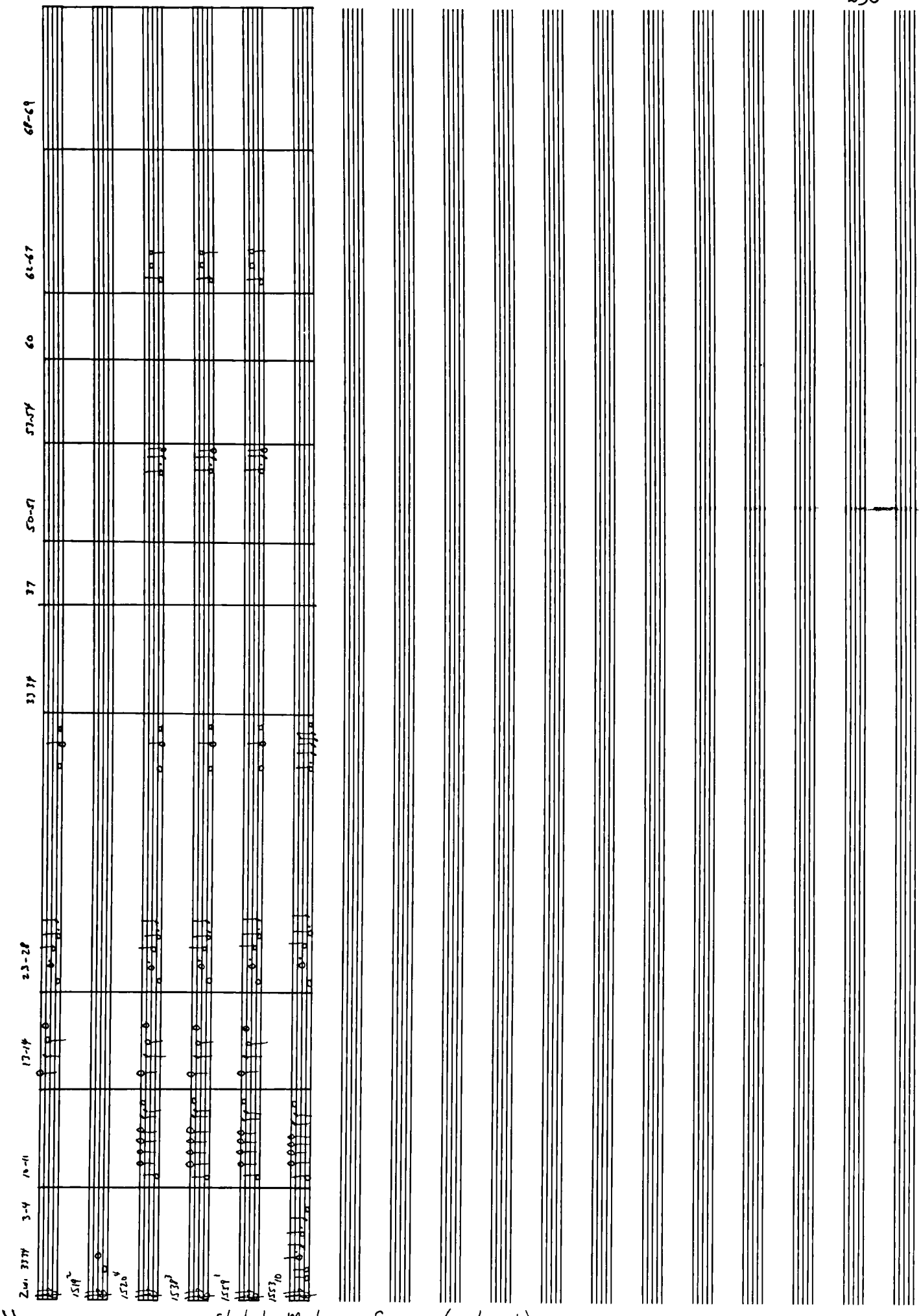
No variants in Bud 2, Cop 1872, Dres 57, Lon RC 1070, SG 464, Sev 1,

Vat S 16, Vat Sm G 426, Vat V 35-40, 1520[4] and 1558[4]

* Between mm 72+73 the following is included:

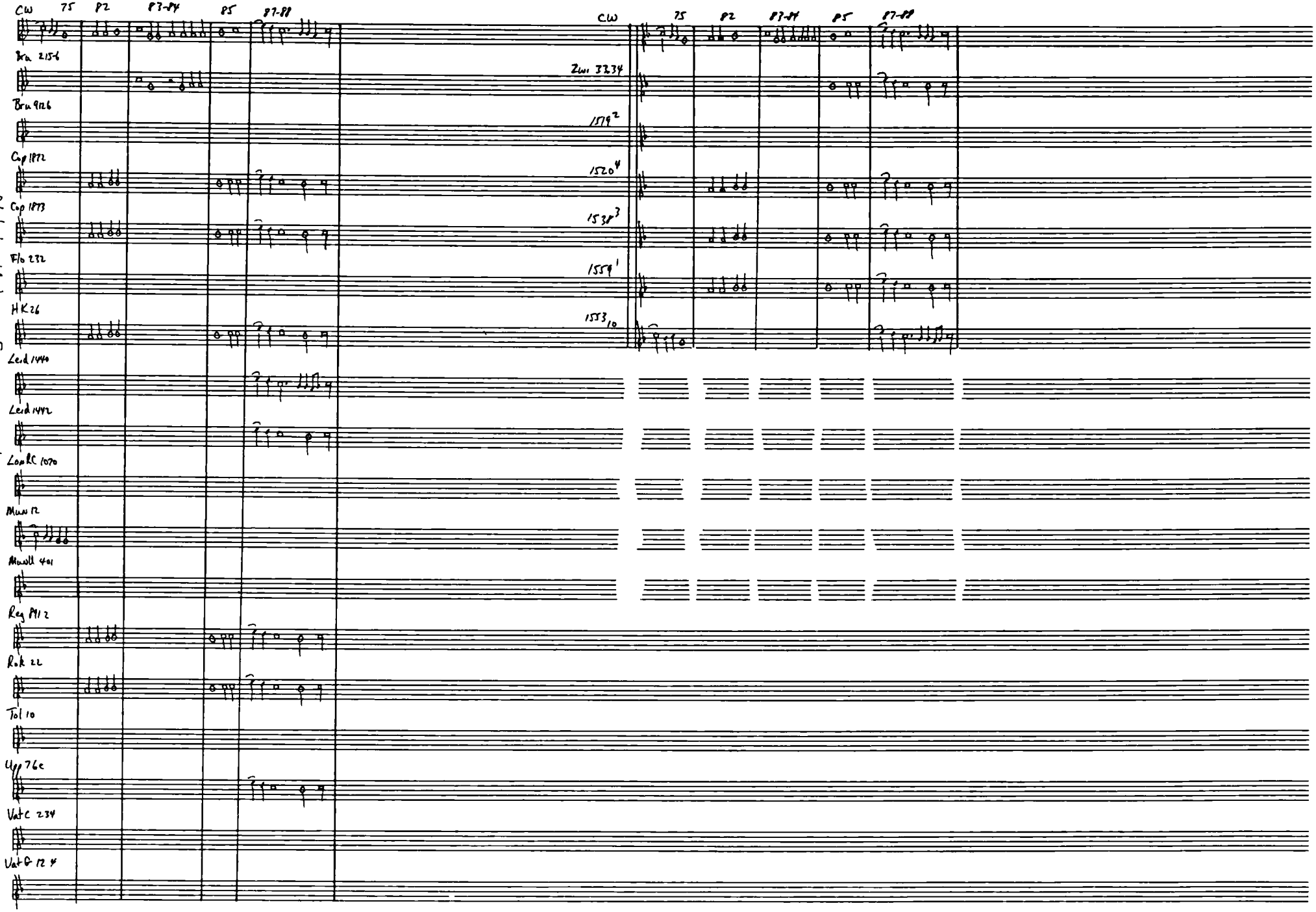


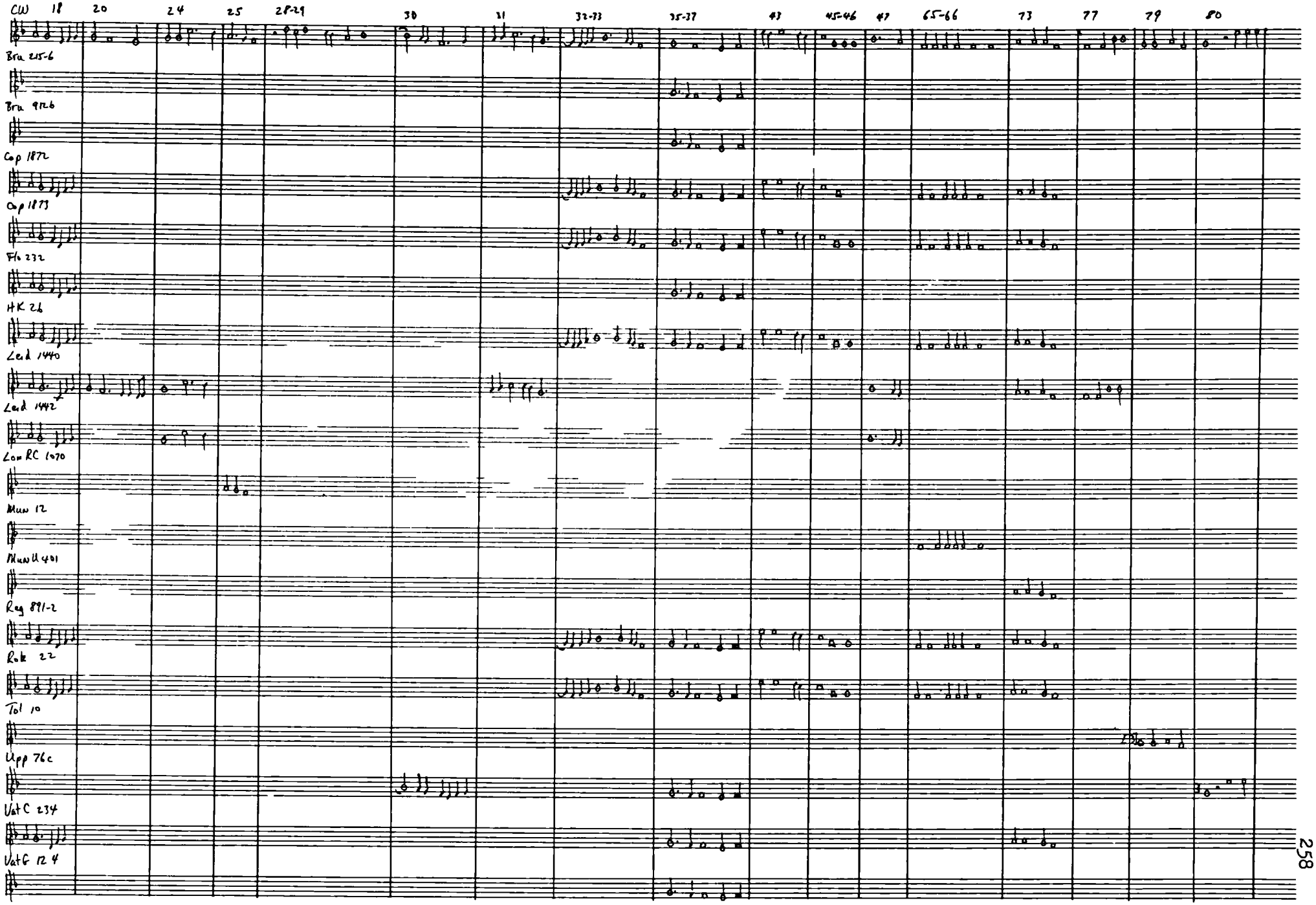

CW
3-4
10-11
13-14
23-28
33-34
37
50-51
53-54
60
62-67
68-69
Bru 215-6
Bru 9126
Cop 1872
Cop 1873
Flo 232
HK 26
Leid 1440
Leid 1442
LonRC 1070
Mnu 12
Munk 401
Reg 891-2
Rok 22
Tol 10
Upp 76c
VatC 234
VatG 12 4



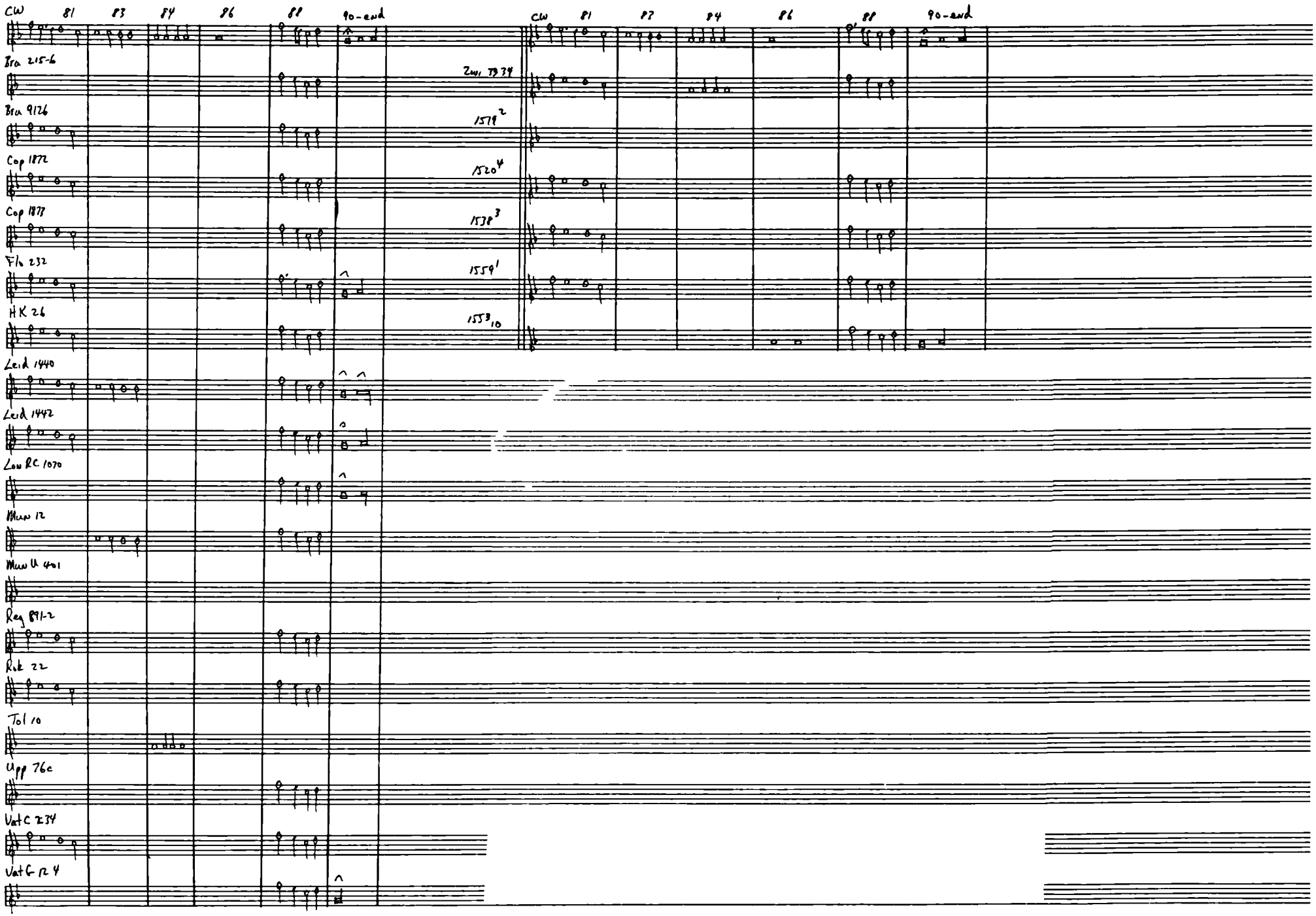
H

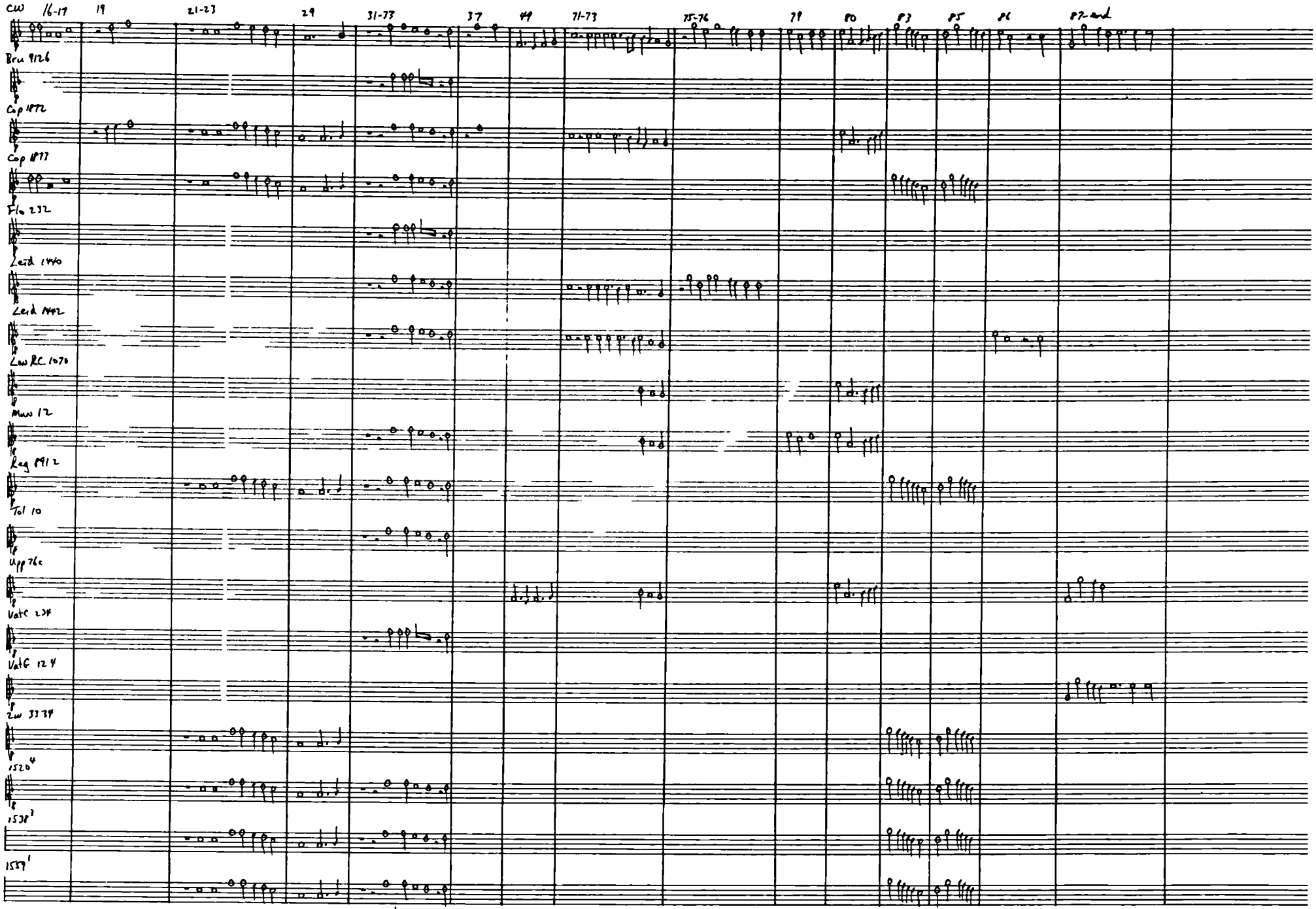
Stabat Mater - Superius (continued)


CW 75 P2 P3-P4 P5 P7-P8
Bru 2156
Bru 9126
Cap 1872
Cap 1873
Flo 232
HK 26
Leid 1440
Leid 1492
LonRC 1070
Mun 12
Mwll 401
Reg P112
Rok 22
Tol 10
Upp 76c
Vat C 234
Vat G 12 *
CW 75 P2 P3-P4 P5 P7-P8
Zwi 3234
1579 2
1520 4
1538 3
1559 1
1553 10


CW
18
20
24
25
28-29
30
31
32-33
35-37
43
45-46
47
65-66
73
77
79
80
Bra 215-6
Bra 9126
Cap 1872
Cap 1873
Flo 232
HK 26
Led 1440
Led 1442
Lon RC 1070
Mun 12
Mun II 401
Reg 891-2
Rok 22
Tol 10
Upp 76c
Vat C 234
Vat G 12 4

Count Walter - Superius (continued)


II
CW 81 83 84 86 88 90-end
CW 81 87 84 86 88 90-end
Bra 215-6
Bra 9126
Cop 1872
Cop 1877
Flo 232
HK 26
Leid 1440
Leid 1442
Lou RC 1070
Mun 12
Mun U 401
Reg 891-2
Rot 22
Tol 10
Upp 76c
Vat C 234
Vat G 12 4
Zwi 7934
1579 2
1520 4
1538 3
1559 1
1553 10
Stabat Mater - Super us (continued)

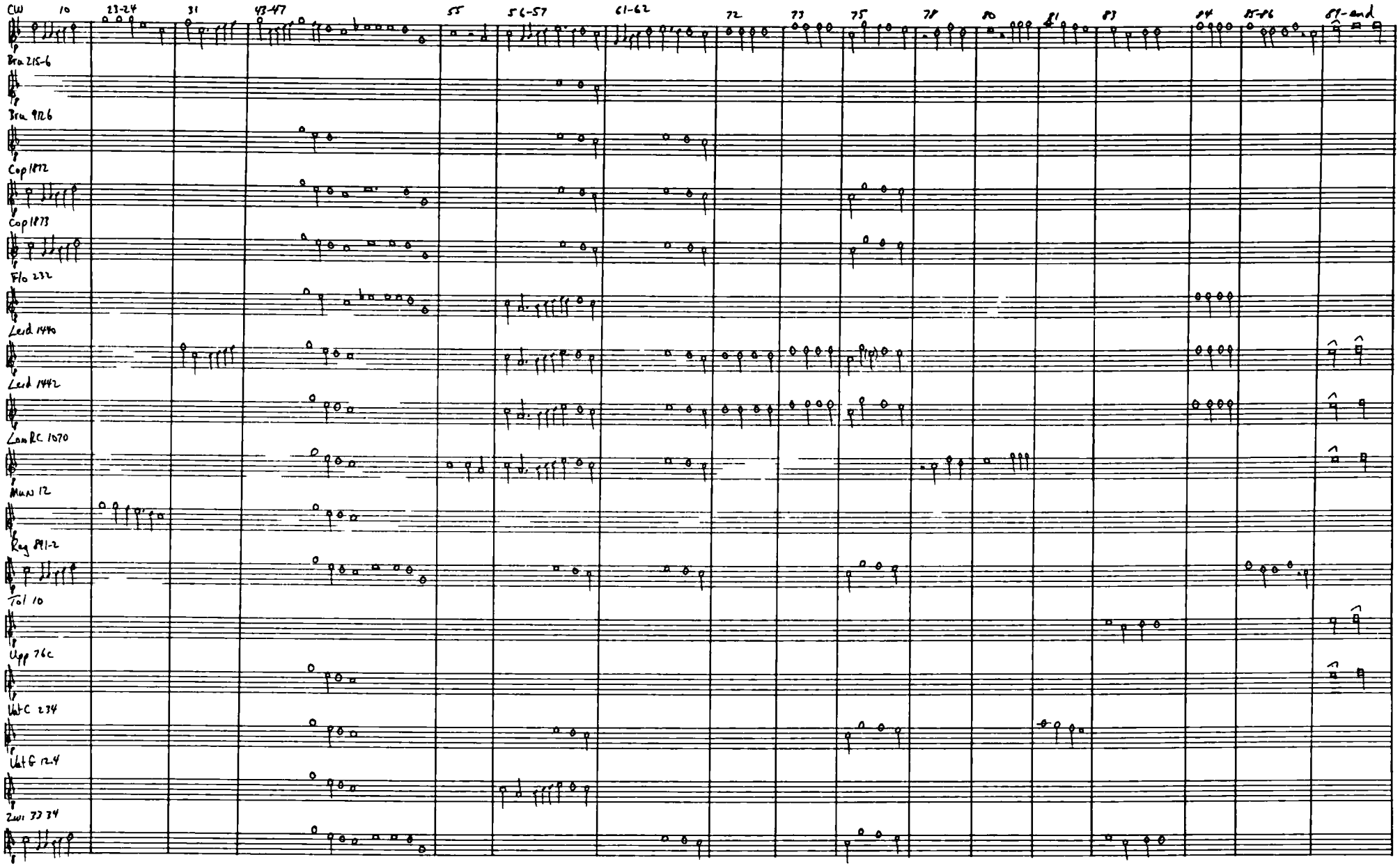


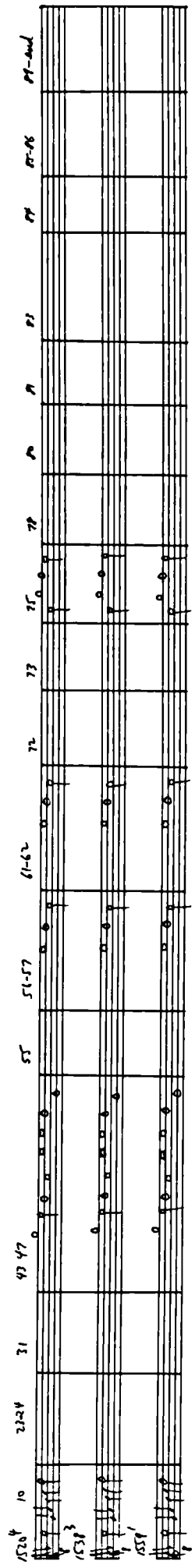
Stabat Mater - Lhéritier

No variants in Bru 215-6, Mun 401, 1519²

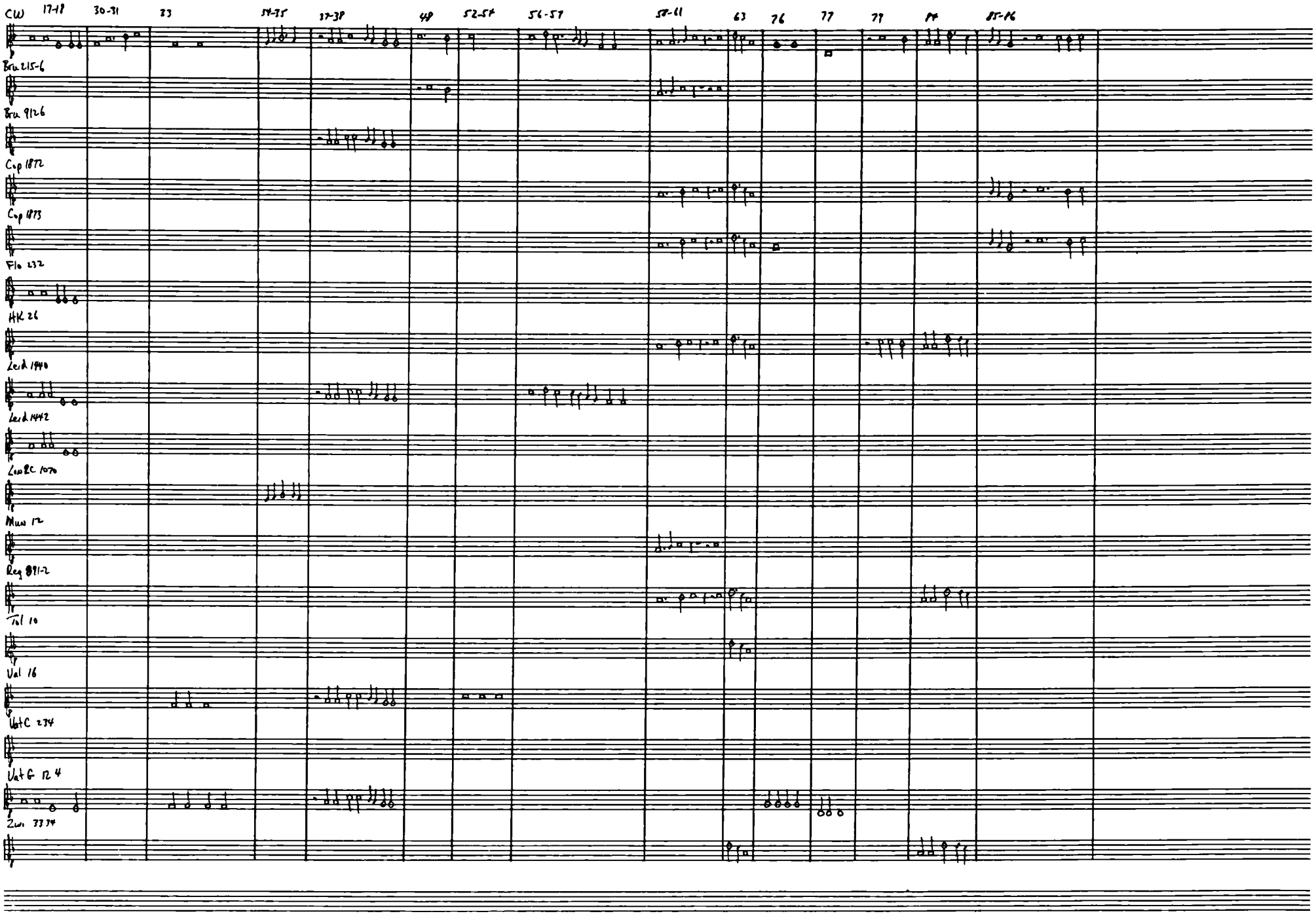
II

Stabat Mater - Altus (continued)





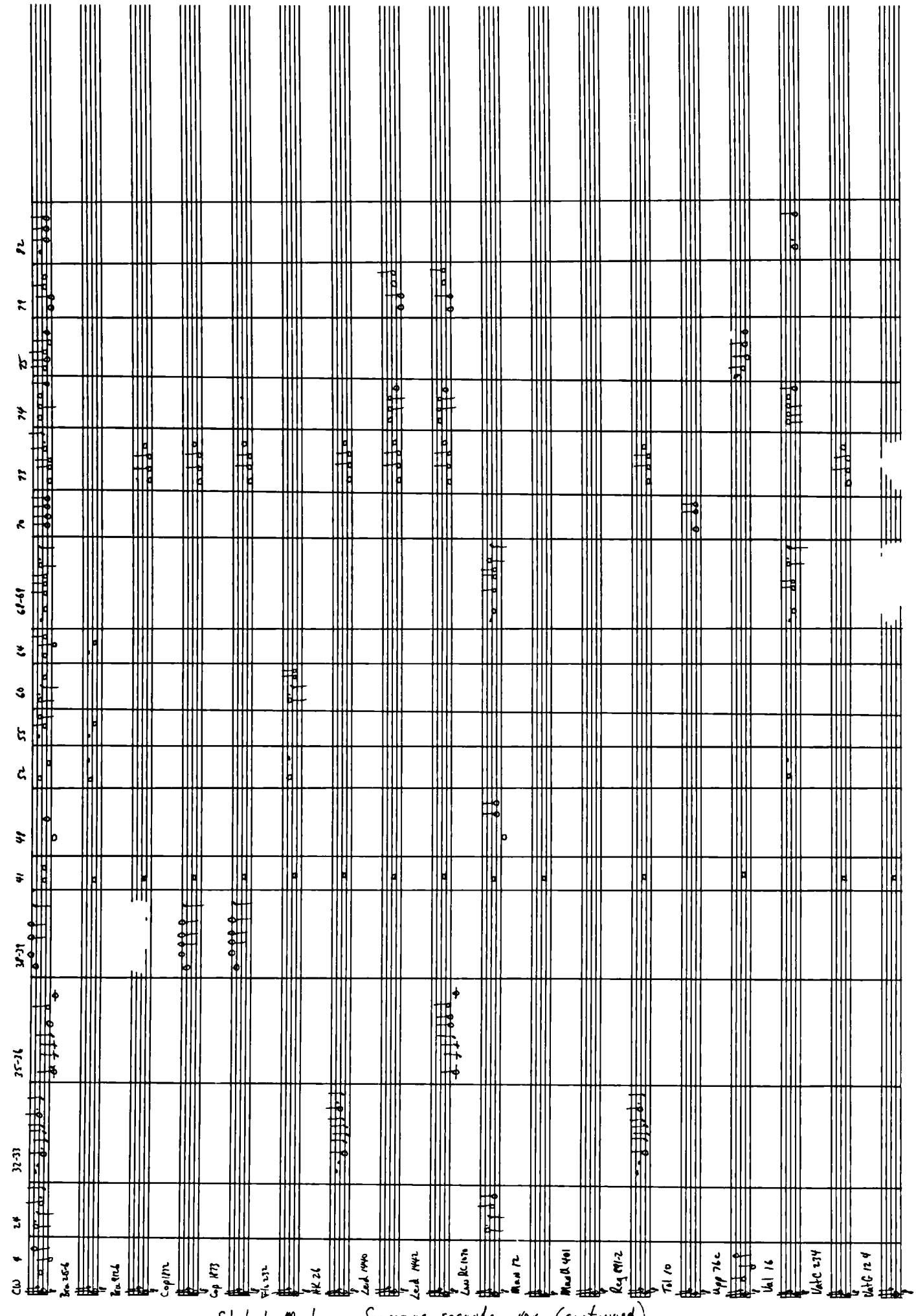
No variants in Munll 401, 1519².



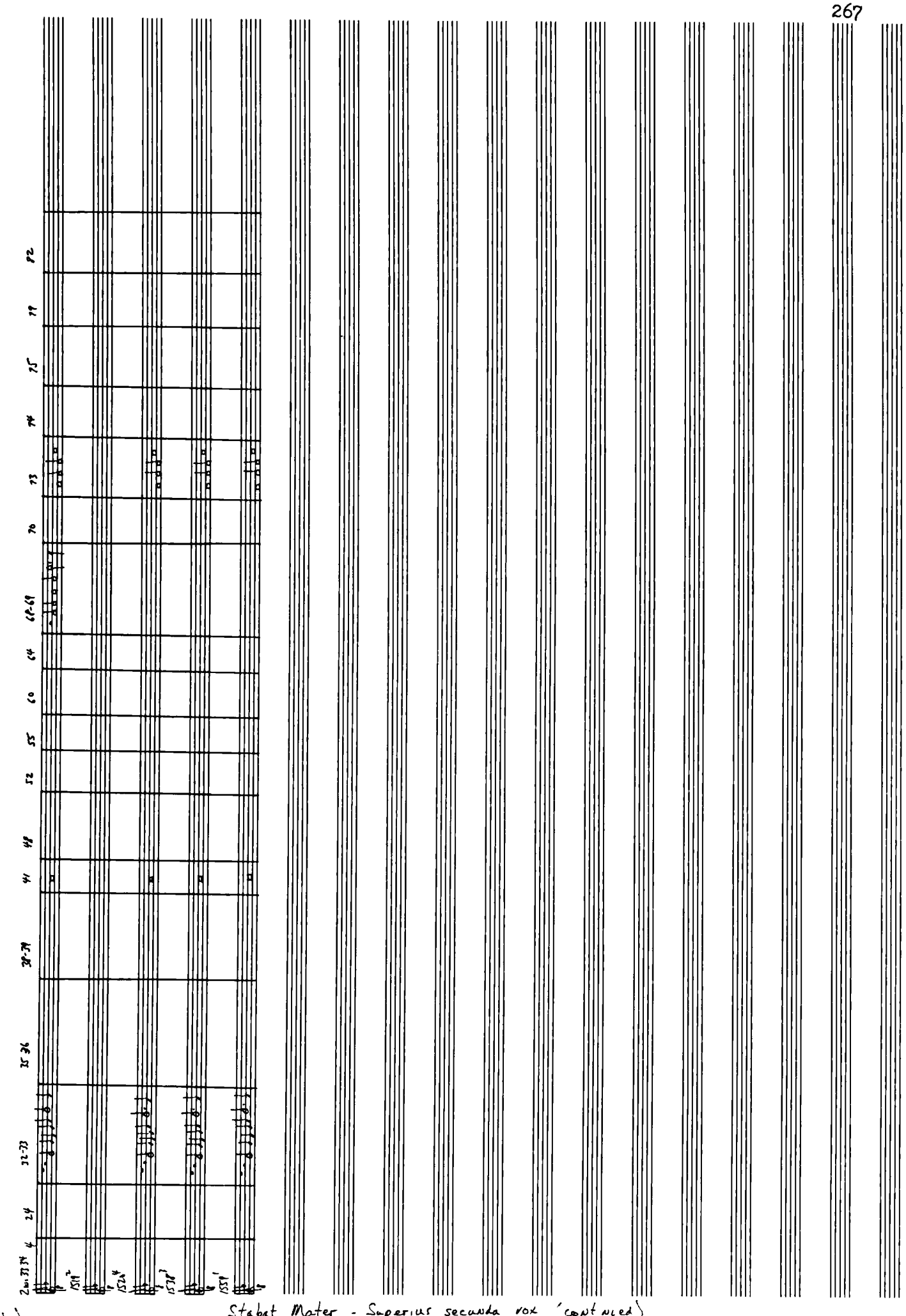
Stabat Mater - Stabat secunda vox

No variants in MunU 401, Upp 76c and 1519[2]

Stabat Mater - Superius secunda vox (continued)

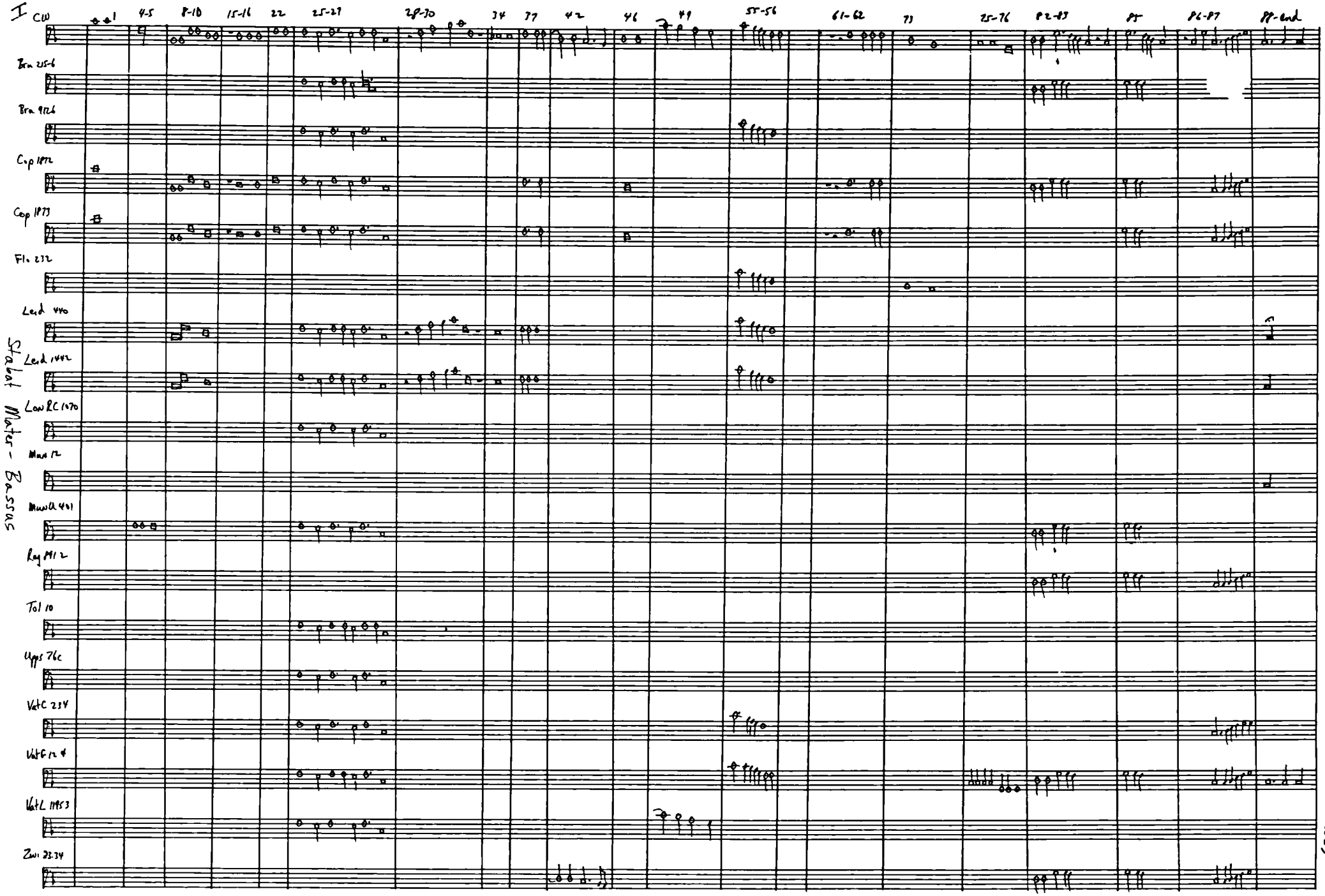


Stabat Mater - Superius secunda vox (continued)

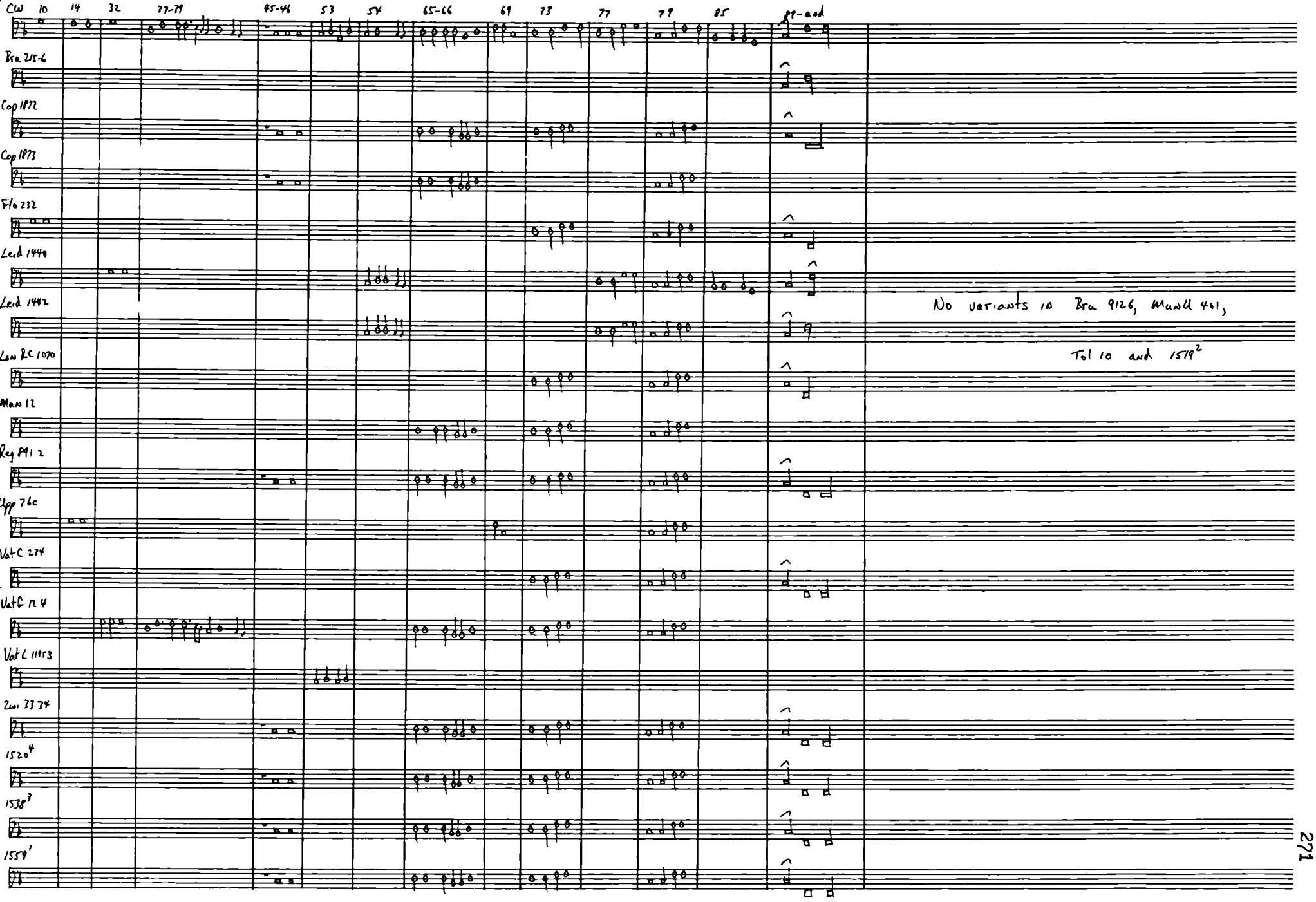


Stabat Mater - Superius secunda vox (continued)

Talbot Mater - Superius secunda vox continued


I
CW
1
4-5
8-10
15-16
22
25-27
29-30
34
37
42
46
49
55-56
61-62
73
75-76
82-83
85
86-87
88-end
Bra 255-6
Bra 1926
Cop 1872
Cop 1873
Fl. 272
Leid 440
Leid 1442
Low RC 1970
Mun 12
Munch 461
Reg M12
Tol 10
Upps 76c
VatC 234
VatG 12 4
VatL 11853
Zwi 2234
Stabat Mater - Bassus

Stabat Mater - Bassus (continued)



Stabat Mater - Bassus (continued)

No variants in Bru 9126, Mund 401, Tol 10 and 1519²

VARIANT USES OF CHROMATIC SIGNS

BENEDICTA ES

Superius, Altus, Quinta vox, Bassus and Sexta vox:

None.

Tenor:

I 60 B^{b} Mun 1536.

INVIOLATA

Superius:

II 42 $C^{\#}$ Mod 9.

Altus:

II 42 $C^{\#}$ Mod 9.

Tenor 1 and Tenor 2:

None.

Bassus:

I 7 B^{b} 1519^{3}.
III 32 B^{b} 1519^{3}.

PATER NOSTER

Superius:

II 39 B^{b} Mun 1536.

Altus:

II 9 $E^{\flat}$ VatV 35-40.

Quinta vox:

II 70 E^b Val 5.
73 E^b Sar 17, Val 5.
75 E^b Sar 17, Val 5.
76 E^b Tol 18, Val 5.
77 $B^\natural$ Mod 9.

Tenor:

None.

Bassus:

I 45 E^b Cop 1872, Gotha 98, Leip 49, Mun 12, Mun_4 1536, MunU 401, Tol 18, VatS 55, VatV 35-40, 1537^1, 1558^4.
92 E^b Cop 1872, Gotha 98, Leip 49, Mun 12, $_4$Mun 1536, MunU 401, Pad 17, Tol 18, VatS 55, 1537^1, 1558^4.

II 43 B^b Sar 17, Val 5.
51 E^b Cop 1872, Gotha 98, Mod_1 9, Mun_4 12, Mun 1536, Tol 18, Utr 3.L.16, Val 5, 1537^1, 1558^4.
52 E^b VatS 55.
57 E^b Cop 1872, Gotha 98, Mod 9, Mun 1536, Utr 3.L.16, Val 5, 1537^1, 1558^4.
69 B^b Sar 17.

Sexta vox:

I 41 E^b Cop 1872, DresG 5, Gotha 98, Leip 49, Mun 12, Pad 17, Tol 18, 1537^1, 1558^4.
58 E^b Cop 1872, DresG 5, $Leip_4$ 49, Mun 12, Pad 17, Tol 18, VatV 35-40, 1537^1, 1558^4.

II 48 E^b Cop 1872, DresG 5, Gotha 98, Mun 12, Pad 17, Sar 17, Sev 1, Tol 18, Utr 3.L.16, Val 5, 1537^1, 1558^4.
54 E^b Sar 17, Val 5.
67 E^b Val 5.
72 E^b Val 5.
73 E^b Val 5.
76 E^b Val 5.

PRAETER RERUM

Superius:

None.

Altus:

I 13 E^b (This and other measures contain two Es. The numbers in brackets designate which of the Es bear flat signs; i.e., 1 = first E only, 2 = second E only and x2 = both Es.)

(1) Leid 1440, Leid 1442, Sev 1, VatG 12.4.

(2) Reg C120.

(x2) Bud 2, Cop 1872, DresG 5, Gotha 98, MunU 401, SG 463, Tar 8, $VatS_4$16, VatSM G.4.26, VatV 35-40, 1519^2, 1520^4, 1537^1, 1558^4.

22 E^b (1) Gotha 98.

Tenor 1:

I 13 E^b Bud 2, Cop 1872, Dres 57, Gotha 98, Leid 1440, Leid 1442, LonRC 1070, MunU 401, Reg C120, SG 463, $Sev_4$1, $Tar_1$8, VatG 12.4, VatS 16, VatV 35-40, 1519^2, 1520^4, 1537^1, 1558^4.

Tenor 2:

I 13 E^b Bol 142, Bud 2, Cop 1872, Gotha 98, Leid 1440, Leid 1442, Reg C120, Sev 1_4, $Tar_1$8, VatG 12.4, VatS 16, VatSM G.4.26, VatV 35-40, 1519^2, 1520^4, 1537^1, 1558^4.

14 E^b Bud 2, Cop 1872, Reg C120, Sev 1, Tar 8, $VatS_4$16, VatSM G.4.26, VatV 35-40, 1519^2, 1520^4, 1537^1, 1558^4.

26 E^b Bud 2, Cop 1872, Tar 8, VatG 12.4, VatS 16, VatV 35-40, 1519^2, 1537^1, 1558^4.

Bassus 1:

I 9 E^b Dres 57, Gotha 98, Leid 1440, Leid 1442, MunU 401, Reg C120, Sev 1, VatL 11953, VatS 16, VatSM G.4.26, VatV 35-40, 1519^2, 1520^4.

10 E^b Leid 1442, MunU 401, VatSM G.4.26, VatV 35-40, 1519^2.

12 B^b 1519^2.

13 E^b Dres 57, Leid 1440, Leid 1442, LonRC 1070, MunU 401, Reg C120, Rok 22, Sev 1, Tar 8, VatG 12.4, VatV 35-40, 1519^2, 1520^4, 1537^1, 1558^4.

23 E^b Cop 1872.

24 E^b MunU 401, Sev 1, VatG 12.4, VatS 16, VatV 35-40, 1519^2.

II 36 E^b Cop 1872, Dres 57, Gotha 98, MunU 401, Reg C120, 1520^4, Rok 22, Sev 1, Tar 8, VatG 12.4, VatV 35-40, 1519^2, 1537^1, 1558^4.

47 B^b LonRC 1070, Reg C120.

61 E^b Leid 1440, Reg C120, Upp 76b, VatG 12.4, VatS 16, VatSM G.4.26.

82 E^b Leid 1440, Leid 1442, MunU 401, Reg C120, 1519^2.

Bassus 2:

I 10 E^b (1) Bud 2, Cop 1872, Dres 57, Leid 1442, Reg C120, SG 464, Sev 1, Tar 8, VatL 11953, 1520^4, 1537^1, 1558^4.

(x2) Gotha 98, Leid 1440, MunU 401, VatV 35-40, 1519^2.

13 E^b Bud 2, Cop 1872, Dres 57, Gotha 98, LonRC 1070, Reg C120, SG 464, Sev 1, Tar 8, Upp 76b, VatG 12.4, VatL 11953, VatV 35-40, 1519^2, 1520^4, 1537^1, 1558^4.

B^b (1) Reg C120, 1519^2.

14 E^b MunU 401, VatV 35-40, 1519^2.

20 E^b (1) Gotha 98.

II 49 B^b 1520^4.

66 E^b Bud 2, Cop 1872, Dres 57, Gotha 98, MunU 401, Reg C120, SG 464, Tar 8, VatG 12.4, VatS 16, 1519^2, 1537^1, 1558^4.

87 E^b Bud 2, Cop 1872, Dres 57, Leid 1440, Leid 1442, MunU 401, Tar 8, VatS 16, VatV 35-40, 1519^2, 1537^1, 1558^4.

STABAT MATER

Superius:

None.

Altus:

I 34 E^b (1) Bru 215-6, Bru 9126, Cop 1872, Cop 1873, Flo 232, Mun 12, MunU 401, Reg 891-2, Tol 10, Upp 76c, VatC 234, VatG 12.4, Zwi 33.34, 1519^2, 1520^4, 1538^3, 1559^1.

II 45 E^b Bru 215-6, Bru 9126, Flo 232, Leid 1440, Leid 1442, Mun 12, MunU 401, Tol 10, Upp 76c, VatC 234, VatG 12.4, 1519^2.

Tenor:

I 72 E^b Bru 9126, Flo 232, VatC 234.

Superius secunda vox:

II 35 E^b Flo 232, VatC 234.

Bassus:

I 34 E^b (1) Bru 9126, Cop 1872, Cop 1873, Flo 232, LonRC 1070, Mun 12, MunU 401, Tol 10, Upp_4 76c, VatC 234, VatG 12.4, VatL 11953, 1519^2, 1520^4.

51 E^b Bru 215-6.

55 B^b 1519^2.

II 30 B^b MunU 401, 1519^2.

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Abbreviations

AM	Analecta Musicologica.
AcM	Acta Musicologica.
AnM	Annales Musicologiques.
BAMS	Bulletin of the American Musicological Society.
CMM	Corpus Mensurabilis Musicae.
CMS	College Music Symposium.
EM	Early Music.
JAMS	Journal of the American Musicological Society.
JLSA	Journal of the Lute Society of America.
JM	Journal of Musicology.
LSJ	Lute Society Journal.
MD	Musica Disciplina.
MF	Music Forum.
ML	Music and Letters.
MQ	Musical Quarterly.
MR	Music Review.
MSD	Musicological Studies and Documents.
PAPS	Proceedings of the American Philosophical Society.
PRMA	Proceedings of the Royal Musical Association.
RM	Revue de Musicologie.
TVNM	Tijdschrift van de Vereniging voor Nederlandse Muziekgeschiedenis.

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